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EXPLANATION

OF THE

ANATOMICAL ATLAS

OF THE

HUMAN BODY IN NATURAL SIZE,

(92 PLATES,)

OF

SURGEON GEN'L'S
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The "Explanation" of Weber's Anatomical Atlas is in parts, a portion of which is translated into English, while the rest, consisting of a supplement, embracing the latest discoveries in Anatomy, is in the original tongue. The task of the American Editor will, for the present, be limited to the correction of inaccuracies or inelegancies, the existence of a few of which in the translation, although made by a learned German, admits of ready explanation.

On the restoration of his health, now seriously impaired, the undersigned will endeavor to present the American reader with a version of the German portion, under a form better adapted to his wants and customs.

SAMUEL FORRY, M.D.

New York, Sept., 1841.

PART I.

ADULT IN NATURAL SIZE.

FIGURE FIRST.

A.

PRESENTING A FRONT VIEW OF A MALE ADULT SKELETON.

GENERAL OBSERVATIONS.

The Skeleton, *scelctus*, is divided into first, the Head, *caput*, which consists of the Bones of the Skull and Face: secondly, the Trunk, *truncus*, composed of the Spine, *columna vertebralis*, the Basin, *pelvis*, the Ribs, *costæ*, and the Breast Bone, *sternum;* and thirdly, the Extremities, *extremitates*, which are divided into Upper and Lower. The total number of bones is 225.

The Bones of the Skull, *ossa cranii*, are eight, viz., one Frontal Bone, *os frontis*, two Parietal Bones, *ossa bregmatis;* one Occipital Bone, *os occipitis*, two Temporal Bones, *ossa temporum*, one Sphenoid Bone, *os sphenoideum*, and one Ethmoid Bone, *os ethmoideum*. The Temporal Bones also contain eight Auditory Bones, viz., two Hammers, *mallei*, two Stirrup Bones, *stapedes*, two Anvils, *incudes*, and two Round Bones, *ossicula subrotunda*. The Bones of the Face, *ossa facici*, are fourteen, viz., two Upper Jaw Bones, *ossa maxillaria superiora*, two Cheek Bones, *ossa jugalia*, two Nasal Bones, *ossa nasi*, two Lachrymal Bones, *ossa lacrymalia*, two Palatine Bones, *ossa palatina*, two Turbinated Bones, *conchæ inferiores;* one Ploughshare Bone, *vomer*, one Lower Jaw, *maxilla inferior*. Besides which there are thirty-two Teeth, *dentes*, viz., eight Incisive, *incisivi*, four Cuspid, *canini*, and twenty Grinding, *molares;* and one Tongue bone, *os hyoideum*.

The Vertebral Column, *columna vertebralis*, consists of twenty-four Vertebræ, *vertebræ*, viz., seven Cervical Vertebræ, *v. colli*, twelve Dorsal Vertebræ, *v. dorsi*, and five Lumbar Vertebræ, *v. lumborum*. The number of the Ribs, *costæ*, is twenty-four; fourteen True, *c. veræ*, and ten False Ribs, *c. spuriæ*. The Breast Bone, *sternum*, is composed of three pieces. The Basin, *pelvis*, consists of one Rump Bone, *os sacrum*, four False Vertebræ, *ossa coccygis*, and two Unnamed Bones, *ossa coxarum*, *s. innominata*.

Seventy bones compose the Upper Extremities, *extremitates superiores*, viz., two Clavicles, *claviculæ*, two Blade Bones, *scapulæ*, two Upper Arm Bones, *humeri*, two small Bones of the Arm, *radii*, two Cubits, *ulnæ;* sixteen Carpal Bones, *ossa carpi*, viz., two Scaphoid or Navicular Bones, *ossa navicularia*, two Lunar, *lunata*, two Cuneiform, *cuneiformia*, *triquetra*, two Pisiform, *pisiformia*, two Trapezial, *trapezialia*, *seu multangula majora*, two Trapezoid, *trapezoidea seu multangula minora*, two Great Bones, *capitata*, and two Unciform Bones, *hamata;* ten Metacarpal Bones, *ossa metacarpi*, twenty-eight Joints of the Fingers, *phalanges digitorum;* six Sesamoid Bones, *ossa sesamoidea*.

Sixty-six bones form the Lower Extremities, *extremitates inferiores*, viz., Two Thigh Bones, *femora*, two Knee Caps, *patellæ*, two Shin Bones, *tibiæ*, two Splint Bones, *fibulæ;* fourteen Tarsal Bones, *ossa tarsi*, viz., two Astragalar Bones, *tali*, two Heel Bones, *calcanei*, two Navicular, *navicularia*, two Cuboid, *cuboidea*, six Cuneiform, *cuneiformia;* ten Metacarpal, *ossa metatarsi;* twenty-eight Joints of the Toes, *phalanges digitorum*, six Sesamoid Bones, *ossa sesamoidea.*

The Head, *Caput.*

A. a.—a^6. b.—b^6. c. Frontal Bone, *os frontis s. frontale. a.* Projecting line, *linea eminens. a^1.* Frontal protuberance, *tuber frontale. a^2.* Superciliary ridge, *arcus superciliaris. a^3.* Smooth surface, *glabella. a^4.* Semicircular line, *linea semicircularis. a^5.* Semicircular plane, *planum semicirculare. a^6.* Coronal suture, *sutura coronalis. b.* Orbitar portion, *pars Orbitalis. b^1.* Zygomatic process, *processus zygomaticus. b^2.* Lachrymal pit, *fossa glandulæ lacrymalis. b^3.* Trochlear spine, *spina trochlearis.* Usually there is but one Trochlear pit, *fossa trochlearis. b^4.* Internal Orbitar holes, *foramina orbitalia interna s. ethmoidea. b^5.* Supra-orbitar edge, *margo orbitalis superior. b^6.* Supra-orbitar notch, *incisura supraorbitalis.* On the other side is a Supra-orbitar hole, *foramen supraorbitale. c.* Nasal notch, *incisura nasalis.*

B. d—d^2. Parietal Bone, *os bregmatis seu parietale.*

d. linea semicircularis. d^1. planum semicirculare. d^2. Sphenoidal angle, *angulus sphenoideus.*

C. e—e^7. Temporal Bone, *os temporum.*

e. Squamous portion, *pars squamosa. e^1.* Glenoid cavity for the Lower Jaw, *cavitas glenoidalis s. sinus articuli maxillæ inferioris. e^2.* Articular eminence, *tuberculum articulare. e^3.* Zygomatic process, *process. zygomaticus s. jugalis. e^4.* Squamous suture, *sutura squamosa. e^5.* Mastoid portion, *pars mastoidea s. mammillaris. e^6.* Mastoid process, *process. mastoideus s. mammillaris. e^7.* External Auditory Hole, *porus acousticus externus.*

D. f—f^5. Sphenoid Bone, *os sphenoideum s. cuneiforme.*

f. Temporal surface of the larger wing of the Sphenoid, *superficies temporalis alæ majoris oss. sphenoidei. f^1.* Orbitar surface, *superficies orbitalis s. anterior alæ majoris oss. sphenoid. f^2.* Lesser wing, *ala minor. oss. sphenoidei. f^3.* Optic hole, *foramen opticum. f^4.* Upper Orbitar fissure, *fissura orbitalis superior s. sphenoidea propria. f^5.* Outer Pterygoid plate, *lamina externa processus pterygoidei oss. spheniodei.*

E. g. Ethmoid Bone, *os ethmoidcum.*

g. External plate of Ethmoid, *lamina externa s. papyracea ossis ethmoidei.*

F. h—h^1. Palate Bone, *os palatinum.*

h. Orbitar process, *processus orbitalis. h^1.* Sphenoidal process, *process. sphenoidalis.*

G. i—i^3. Lachrymal Bone, *os lacrymale s. unguis.*

i. Orbitar surface, *superf. orbitalis. i^1.* Lachrymal pit for the Lachrymal sac, *sulcus sacci lacrymalis. i^2.* Lachrymal crest, *crista lacrymalis. i^3.* Lachrymal hook, *hamulus cristæ lacrymalis.*

H. k—k^{13}. Upper Jaw, *os maxillare superius.*

k. Superf. orbitalis. k^1. Infraorbitar canal, *canalis infraorbitalis. k^2.*

Facial surface, *superf. faeialis.* k^3. Infraorbitar hole, *foramen infraorbitale.* k^4. Maxillary pit, *fossa maxillaris.* k^5. Smaller point of *superfic. temporalis, s. tuberositas maxillæ superioris.* k^6. Nasal or Frontal process, *process. nasalis seu frontalis.* k^7. Pit for the Lachrymal sac, *sulcus saeci laerymalis process. frontalis maxillæ sup.* k^8. Zygomatic process, *process. zygomaticus.* k^9. Alveolar process, *p. alveolaris.* k^{10}. *Incisura nasalis.* k^{11}. Anterior nasal Spine, *spina nasalis anterior.* k^{12}. k^3. Partition of Nostrils, *septum narium.*

I. l—l^1. Malar Bone, *os zygomaticum s. jugale s. malæ.*

l. Malar surface, *superficies malaris s. externa.* l^1. Orbitar surface, *superf. orbitalis.* l^2. Upper Edge, *margo inferior, et tuberositas jugalis s. zygomatica.* l^3. Under Edge, *margo inferior, et tuberositas jugalis s. zygomatica.* l^4. Maxillary process, *proeessus maxillaris.* l^5. Spheno frontal process, *processus spheno-frontalis.* l^6. Temporal process, *process. temporalis.* l^3. l^6. Temporal edge, *margo temporalis.*

K. m^1. Nasal Bone, *os nasi.*

m. External surface, *externa s. anterior.* m^3. Opening for an artery and vein, *foramen ossis nasi.*

L. n—n. Lower Jaw, *os maxillare inferius s. mandibula.*

n-n. Body, *corpus maxillæ inferioris.* n^1. External or anterior opening of the Inferior Maxillary canal, *apertura anterior eanalis maxillæ inferioris seu foramen mentale s. maxillare anterius.* n^2. External oblique line, *linea obliqua externa.* n^3. Chin, *mentum*, and Mental pit, *fossa mentalis.* n^4. External mental spine, *spina mentalis externa.* n^5. Upper edge or Alveolar process, *margo s. proeessus alveolaris.* n^6. Under edge or Base, *margo inferior s. basis maxillæ.* n^7.—^{14}. *ramus maxillæ inferior.* n^7. External surface, *superf. externa.* n^8. Angle, *angulus maxillæ inferior.* n^9. Coronoid process, *process. coronoideus.* n^{10}. Condyloid process, *proeess. eondyloideus.* n^{11}. Head of the same, *capitulum.* n^{12}. Neck, *collum.* n^{13}. Pit in the Neck, *fossa colli s. process. condyloidei.* n^{14}. Upper semilunar edge, *margo superior s. ineisura semilunaris.*

IV—XXIV. Spinal Column, *Columna Vertebrarum, s. Spinalis.*

4. 5. 6. 7. The under four Cervical Vertebræ, *vertebræ colli.* a. The body, *corpus.* a^1. The upper edge, *margo superior.* a^2. The under edge, *margo inferior.* a^3. Intervertebral ligament, *ligamentum intervertebrale.* a^4. Anterior root of the transverse process, *radix anterior processus transversi.* a^5. *radix posterior p. t.* a^6. Vertebral hole, *foramen vertebrale.* a^7. Upper oblique or articular process, *processus obliquus seu articularis superior.* a^8. Under oblique articular process, *proeessus obliquus s. artieularis inferior.* a^9. Intervertebral hole, *foramen intervertebrale.* 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.* The twelve Dorsal Vertebræ, *vertebræ dorsi.* b. *corpus.* b^1. *margo superior.* b^2. *margo inferior.* b^3. Upper articular surface on the body on the first Dorsal vertebra, with the head of the first Rib, *sinus artieularis superior eostæ*

* 10, 11, 12, 13, 14, 15, 16 of the dorsal vertebræ are not to be seen, as the sternum lies before them.—*Editor.*

primæ. b^4. *sinus articularis inferior costæ secundæ.* b^5. *ligamentum intervertebrale.* b^6. *processus transvers.* b^7. Articular surface and connection of the transverse process of the first Dorsal vertebra and the tubercle of the first Rib, *sinus articularis transversalis.* b^8. *foramen intervertebrale.* 20, 21, 22, 23, 24. The five Lumbar Vertebræ, *c. corpus.* c^1. *margo superior.* c^2. *margo inferior.* c^3. *ligamentum intervertebrale.* c^4. *processus transversus.* c^5. *processus obliquus superior.*

I—XII. *e*—e^{13}. The Ribs, *Costæ,* and Breast Bone, *Sternum.*

I—VII. True Ribs, *costæ veræ;* VIII—XII. False Ribs, *costæ spuriæ. d.* Body and outer surface of the Rib, *corpus et superficies externa costæ.* d^1. Anterior extremity, *extremitas anterior.* d^3. d^4. d^5. Posterior extremity, *extremitas posterior.* d^3. Head of the Rib, *capitulum costæ.* d^4. Neck, *collum.* d^5. Tubercle, *tuberculum.* d^6. *margo superior.* d^7. *margo inferior.* d^8. Connection of the Ribs with the costal cartilages, *connexio costarum cum cartilaginibus costarum.* d^9. *superficies interna.* d^{10}. Costal groove, *sulcus costalis.* d^{11}. Costal cartilage, *cartilago costarum s. costalis.* d^{12}. Connection of the Costal Cartilage with the Breast Bone, *connexio cartilaginis costalis cum sterno.*

e. Handle of the Breast Bone, *manubrium sterni.* e^1. *Corpus sterni.* e^2. Ensiform process, *processus xiphoideus s. ensiformis.* e^3. Ensiform cartilage, *cartilago ensiformis.* e^4. e^5. *Extremitas superior.* e^4. Semilunar notch, *incisura semilunaris.* e^5. Articular surfaces for the Clavicles, *incisuræ claviculares.* e^6. e^{12}. *margo lateralis.* e^7. *extremitas inferior manubrii sterni.* e^8. *extremitas superior corporis sterni.* e^9. *margo lateralis.* e^{10}. *extremitas inferior.* e^{11}. *extremitas superior processus xiphoidei.* e^{12}. *margo lateralis.* e^{13}. *extremitas inferior.*

A. B. C. I. II. III. The Basin, *Pelvis.*

A. Rump Bone, *os sacrum.*

1. *superficies anterior seu interior.* 2. Promontory, *promontorium.* 3. Arched edge, *margo arcuatus s. linea terminalis ossis sacri.* 4. 4. *Superfic. superior.* 5. Sacro-iliac symphysis, *symphysis sacro-iliaca.* 6. Anterior Sacral holes, *foramina sacralia anteriora.* 8. *foramina sacralia posteriora.* 8. *foramen intervertebrale.* 9. Transverse lines, *lineæ transversæ.*

B. Os coccygis.

I. II. III. Unnamed Bones, *ossa innominata s. coxarum. I.* Hip Bone, *os ilii. II.* Share Bone, *os pubis. III.* Haunch Bone, *os ischii.*— 10. 11. *superficies interna superior anterior.* 12. *superfic. interna anterior inferior.* 13. Arched line, *linea eminens arcuata.* 14. Unnamed line, *linea innominata s. terminalis.* 15. Iliac crest, *crista ossis ilii.* 16. Outer lip of the same, *labium externum.* 17. Inner lip of the same, *labium internum cristæ ossis ilii.* 18. Superior anterior spinous process, *spina anterior superior.* 19. Inferior anterior spinous process, *spina anterior inferior.* 20. Superior anterior semilunar notch, *incisura semilunaris superior anterior.* 21 Inferior anterior semilunar notch, *incisura*

anterior inferior ossis ilii. 22. Body of Share Bone, *corpus ossis pubis*. 23. Horizontal branch, *ramus horizontalis, o. p.* 24. Pubic crest, *pecten s. crista pubis*. 25. Pubic tubercle, *tubercul. pubis*. 26. Obturator notch, *incisura obturatoria*. 27. Descending branch, *ramus descendens*. 28. Pubic symphysis, *symphysis ossium pubis*. 29. Pubic angle, *angulus ossium pubis*.—30. *corpus ossis ischii*. 31. Acetabular notch, *incisura acetabuli*. 32. Cotyloid cavity, *acetabulum*, and its edge, *limbus acetabuli*. *III*. 33. Descending branch, *ramus descendens*. 34. Ascending branch of ischium, *ramus adscendens oss. ischii*. 35. Ischial spine, *spina ossis ischii*. 36. Ischial tuberosity, *tuber s. tuberositas oss. ischii*. 37. Oval or obturator hole, *foramen ovale s. obturatorium*. 37. Greater ischiatic notch, *incisura ischiadica major*.

Bones of the Pectoral Limbs, Upper Extremities or Arms. *Ossa extremitatum superiorum*.

A. Clavicle, *clavicula*.

a. corpus claviculæ. a^1. a^3. a^4. Sternal extremity, *extremitas anterior s. sternalis*. a^2. a^6. Scapular extremity, *extremitas scapularis s. humeralis*. *a. a*^{1}. *a*^{2}. *superficies anterior et superior*. a^4. a^6. *superf. inferior*. a^5. Interarticular cartilage at the Sterno clavicular joint, *cartilago interarticularis claviculæ et sterni*. a^6. *tuberculum s. colliculum claviculæ*. a^7. *cartilago interarticularis claviculæ et p. acromialis*.

B. Shoulder Blade, *scapula*.

b. Subscapular pit, *fossa subscapularis s. superficies anterior scapulæ*. b^1. *margo superior*. b^2. Semilunar notch, *incisura semilunaris*. b^3. b^4. b^5. b^6. *margo externus*. b^4. *labium posterius*. b^5. *labium anterius*. b^6. Pit between the two lips, *sulcus marginis externi*. b^7. Inner edge or base of the Shoulder Blade, *margo internus s. basis scapulæ*. b^8. Condyloid process, *process. condyloideus*. b^9. *collum scapulæ*. b^{10}. Glenoid cavity, *superficies articularis humeri s. cavitas glenoidea*. b^{11}. Tubercle of Condyloid process, *tuberculum process. condyloidei*. b^{12}–b^{14}. Coracoid process, *process. coracoideus*. b^{12}. *radix*. b^{13}. *corpus*. b^{14}. *apex*. b^{15}. Supraspinate pit, *fossa supraspinata*. b^{16}. b^{17}. Acromion, *acromion s. process. acromialis*. b^{16}. Superior surface, *superf. superior*. b^{17}. Inferior surface, *superf. inferior*.

C. Upper Arm Bone, *os Humeri s. Brachii*.

c. corpus s. diaphysis. c^1. c^{14}. Upper end, *extremitas superior*. c^2.—c^{20}. Lower end, *extremitas inferior*. c^3. *superfic. externa*. c^4. *superfic. interna*. c^5. External angle, *angulus externus*. c^6. *angulus anterior*. c^7. *angulus internus*. c^8. Articular head, *caput articulare*. c^9. *collum*. c^{10}. Greater tubercle, *tuberculum majus*. c^{11}. Lesser tubercle, *tuberculum minus*. c^{12}. Bicipital groove between them, *sulcus s. semicanalis ossis humeri*. c^{13}. Ridge from the great tubercle, *crista tuberculi majoris*. c^{14}. Ridge from the little tubercle, *crista tuberculi minoris*. c^{15}. External condyle, *condylus externus*. c^{16}. Internal condyle, *condylus internus*. c^{17}. Anterior small pit, *fossa anterior minor s. externa*. c^{18}. Anterior large pit, *fossa anterior major s. interna*. c^{19}. c^{20}. Cubital process, *processus cubitalis*. c^{21}. Head, *capitulum s. eminentia capitata*. c^{22}. Pulley, *trochlea seu rotula*.

D. Small Bone of the Arm, *radius.*

d. corpus. d[1]. *extremitas superior. d*[2]. *extremitas inferior. d*[3]. *superficies volaris s. anterior. d*[4]. *superficies externa s. radialis. d*[5]. *angulus anterior. d*[6]. *angulus internus s. crista radii. d*[7]. Head and orbicular circlet, *capitulum radii, et circumferentia articularis. d*[8]. *collum. d*[9]. *tuberculum. d*[10]. Base, *basis s. cavitas glenoidalis. d*[11]. *d*[12]. Styloid process, *process. styloideus. d*[13]. *incisura semilunaris.*

E. Cubit, *ulna s. cubitus.*

e. Body, *diaphysis. e*[1]. Upper Extremity. *e*[2]. *extremit. inferior. e*[3]. *superficies volaris. e*[4]. *angulus anterior. e*[5]. *angulus externus s. crista ulnæ. e*[6]. Coronoid process, *proccssus coronoidcus. e*[7]. *tuberositas ulnæ. e*[8]. *capitulum ulnæ. e*[9]. *process. styloideus. e*[10]. *spatium interosseum.*

F. N. Carpal Bones, *ossa carpi.*

F. Scaphoid or Navicular Bone, *os naviculare, f.* its tubercle, *tuberculum ossis navicularis. G.* Lunar Bone, *os lunatum. H.* Cuneiform Bone, *os cuneiforme seu triquetum. I.* Pisiform Bone, *os rotundum s. pisiforme. K.* Trapezial Bone, *os multangulum majus. g.* its tubercle, *tuberculum ossis multanguli majoris. L.* Trapezoid Bone, *os multangulum minus. M.* Great Bone, *os capitatum. N.* Unciform Bone, *os hamatum. h.* its hook, *hamulus oss. hamati.*

O–S. Metacarpal Bones, *ossa metacarpi.*

O. Metacarpal Bone of the Thumb, *os metacarpi pollicis. P.* of Index Finger, *digiti indicis. Q.* of Middle Fingers, *digiti medii. R.* of Ring Finger, *dig. annularis. S.* of Little Finger, *dig. auricularis. i. corpus. k. r. extremitas superior s. basis. l. s. extremitas anterior s. capitulum. m. t. u.* Sesamoid Bones, *ossa sesamoidea. n. angulus externus s. radialis. o. angulus internus s. ulnaris. p. superfic. ulnaris. q. superf. radialis.*

T–V. Joints of the Fingers, *phalanges digitorum.*

v. superf. volaris. w. basis s. extrem. sup. x. extrem. inferior s. trochlea. y. margo radialis. z. margo ulnaris.

Bones of the Abdominal Limbs, or Lower Extremities, *Ossa extremitatum inferiorum.*

A. Thigh Bone, *os femoris s. cruris.*

a. corpus. a[1]. *extremit. superior. a*[2]. *extremit. infer. a*[3]. *superf. anterior. a*[4]. *angulus externus. a*[5]. *angulus internus. a*[6]. *caput. a*[7]. *collum. a*[8]. Great Trochanter, *trochantcr major. a*[9]. Little Trochanter, *trochantcr minor. a*[10]. Anterior Intertrochanteric line, *linea intertrochanterica anterior. a*[11]. *condylus externus. a*[12]. *condylus intcrnus. a*[13]. Knee Cap, *patella. a*[14]. *superf. articularis extremit. inferioris. a*[15]. Semilunar cartilages of the Knee, *cartilagines semilunares genu.*

B. Splint Bone, *fibula s. peronc.*

b. corpus. b^1. extremit. sup. s. capitulum fibulæ. b^2. extremit inf. b^3. superf. ext. b^4. superf. interna. b^5. angulus externus. b^6. angulus internus s. crista fibulæ. b^7. angulus anterior. b^3. b^8. linea obliqua. b^9. Outer ankle, *malleolus externus s. fibulæ.*

C. Shin Bone, *tibia.*

e. diaphysis s. corpus. c^1. extrem. sup. c^2. extrem. inf. e^3. superf. externa. c^4. superf. interna s. anterior. e^5. angulus externus. c^6. angulus internus. c^7. angulus anterior s. crista tibiæ. e^8. condylus externus. c^9. condylus internus. e^{10}. tuberositas tibiæ. e^{11}. Inner Ankle, *malleolus internus s. tibiæ. e^{12}. incisura fibularis s. peronæ. e^{13}. basis s. superf. artieularis.*

D–I. Tarsal Bones, *ossa tarsi.*

D. Astragalar Bone, *talus s. astragalus. E.* Heel Bone, *calcaneus s. os calcis. e. processus lateralis s. sustentaculum tali. F.* Navicular Bone, *os navieulare. e. tuberculum oss. navicularis. G.* First or Internal Cuneiform Bone, *os cuneiforme primum s. internum. H.* Second or Middle Cuneiform Bone, *os cuneiforme secundum s. medium. I.* Third or External Cuneiform Bone, *os cuneiforme tertium s. externum. K. L. M. N. O.* Metatarsal Bones, *ossa metatarsi. P. Q. R. S.* Joints of the Toes, *phalanges digitorum pedis. g. ossa sesamoidea.*

Upper Surface of the Foot.

A. calcaneus. a. tuberositas calcanei. b. superf. superior. c. superf. externa. B. talus. d. superf. artieularis superior. e. superf. artieularis lateralis externa s. fibulæ. f. process. eondyloideus s. caput tali. C. os naviculare. D. Cuboid Bone, *os euboideum. E. os cuneiforme primum. F. seeundum. G. tertium.*

FIGURE SECOND.

B.

PRESENTING A POSTERIOR VIEW OF A MALE ADULT SKELETON.

THE HEAD.

A. Frontal Bone, *os frontis.*

a. processus zygomaticus. a^1. *planum semicirculare.*

B. Parietal Bone, *os parietale.*

b. Parietal protuberance, *tuber parietale.* *b.* b^1. *linea semicircularis superior inferior, et planum semicirculare.* b^2. *angulus sphenoidalis.* b^3. *angulus mastoideus.* b^4. Occipital angle, *angul. occipitalis.* b^5. Sagittal suture, *sutura sagittalis.* b^6. Coronal suture, *sutura coronalis.* b^7. Occipital suture, *sutura occipitalis.* b^8. Parietal hole, *foramen parietale.* b^9. Squamous suture, *sutura squamosa.*

C. Occipital Bone, *os occipitis.*

c. External Occipital protuberance, *spina s. protuberantia occipitis externa.* c^1. Superior semicircular ridge, *linea semicircularis superior.* c^2. External Occipital crest, *crista occipitis externa.* c^3. Internal semicircular line, *linea semicircularis inferior oss. occipitis.* c^4. Parietal edge, *margo parietalis.* c^5. Mastoid edge, *margo mastoideus.*

D. Petrous Bone, *os petrosum.*

d. Squamous part, *pars squamosa.* d^1. Mastoid part, *pars mastoidea.* d^2. Mastoid process, *process mastoideus.* d^3. Mastoid notch, *incisura mastoidea.* d^4. Mastoid hole, *foramen mastoideum.* d^5. *process. zygomaticus.*

E. Cheek Bone, *os zygomaticum.*

e. Temporal process, *process. temporalis.* e^1. e^1. Temporal surface, *superf. temporalis.* e^2. Inferior orbitar fissure, *fissura orbitalis inferior.* e^3. Posterior zygomatic hole, *foramen zygomaticum posterius.*

F. Upper Jaw Bone, *os maxillare superius.*

f. Temporal surface, *superficies temporalis s. tuberositas maxillæ superioris.* f^1. Orbitar surface, *superf. orbitalis corporis maxillæ sup.*

G. Lower Jaw Bone, *os maxillare inferius.*

g. Internal surface, *superficies interna s. posterior.* g^1. Coronoid process, *process. coronoideus.* g^2. Condyloid process, *process. condyloideus.*

Vertebral Column, *columna vertebrarum.*

1 – 7. Cervical vertebræ, *vertebræ colli.* 1. *vertebra prima s. atlas.* *a.* Posterior arch, *arcus posterior.* a^1. Posterior tubercle, *tuberc. posterius.* a^2. *process. transversus.* a^3. *process. obliquus s. articularis superior.* a^1. *process. obliquus s. articularis inferior.* 2. *vertebra secunda seu epistropheus.* *a. arcus.* a^1. Spinous process, *process. spinosus.* a^2. *process.*

transversus. a^3. *proeess. obliquus superior.* a^4. *inferior.* a^5. *foramen vertebrale.* a^6. *eorpus.* a^7. Dentiform process of second Vertebra, *process. odontoideus s. dens.* 8—19. *vertebræ dorsi. b. areus.* b^1. *processus spinosus.* b^2. *processus transversus.* b^3. *process. obliq. sup.* b^4. *inferior.* 20—24. *vertebræ lumborum. c. arcus.* c^1. *process. spinosus.* c^2. *process. obliquus superior.* c^3. *inferior.* e^4. *proeess. transversus.* c^5. *eorpus.* c^6. *ligamentum intervertebrale.*

I—XII. Ribs, *eostæ.*

d. Tubercle of the Ribs, *tuberculum eostæ.* d^1. Articulation of the Ribs with the *processus transversus* of the Vertebra. d^2. Angle of the Rib, *angulus eostæ.* d^3. *cartilago costalis.*

Pelvis.

A. Rump Bone, *os saerum.*

1—5. The five false vertebræ forming the sacrum of the young subject, *vertebræ pelvis s. spuriæ oss. sacri. B. os coccygis.* 6—9. The four false vertebræ of the *os coecygis, vertebræ spuriæ oss. coccygis.* 5—10. Vertebral canal, *eanalis sacralis*, and bones of the first and fifth sacral vertebræ, *corpus vertebræ primæ et quint. oss. sacri.* 11—15. *areus vertebrarum oss. saeri.* 16—18. False spinal processes, *proeessus spinosi spurii.* 18. Sacral horns, *cornua sacralia.* 19. Oblique process, *process. obliquus vertebræ primæ.* 20. 21. 22. 23. False oblique processes, *processus obliqui spurii.* 24. 25. 26. 27. 28. *processus transversi spurii.* 24. 29. 30. Lateral parts, *partes laterales.* 24—29. *tuberositas oss. sacri.* 31. Hinder sacral holes, *foramina sacralia posteriora.* 32. *incisura intervertebralis.* 33. Coccygeal horns, *cornua coccygea s. process. obliqui spurii.* 34. *processus transversi spurii.—C. ossa coxarum s. innominata.* 35. *labium posterius cristæ oss. ilii.* 36. *planum semicirculare superius superficiei externæ.* 37. *linea eminens semicircularis.* 38. *planum semieirculare inferius.* 39. *spina posterior superior.* 40. *spina posterior inferior.* 41. *incisura semilunaris.* 42. *incisura ischiadica. superior s. major.* 43. *corpus oss. ischii.* 44. *limbus acetabuli.* 45. Spine of the Ischium, *spina oss. ischii.* 46. 47. *ramus descendens.* 46. Tuberosity of the Ischium, *tuberositas oss. ischii.* 47. Under or lower Ischiatic notch, *ineisura ischiadica minor.* 48. *ramus descendens.* 49. *corpus oss. pubis.* 50. *ramus horizontalis.* 51. *ramus deseendens.* 52. *foramen ovale s. obturatorium.*

Upper Extremities, *extremitates superiores.*

A. Clavicle, *elavicula.*

a. extremitas anterior s. sternalis. a^1. *extremit. scapularis.* a^2. *tuberculum elavieulare.*

B. Shoulder Blade, *seapula.*

b. Upper spinal pit, *fossa supraspinata.* b^1. Lower spinal pit, *fossa infraspinata.* b^2. Three cornered surface, *superficies triangularis.* b^3. Spine, *spina scapulæ.* b^4. Acromion, *acromion.* b^5. *angulus superior s. internus.* b^6. *angulus externus s. process. condyloideus.* b^7. *angulus inferior.* b^8. *margo superior.* b^9. *margo internus s. basis scapulæ.* b^{10}. *margo externus.*

C. Upper Arm Bone, *os humeri.*

c. caput. c^1. collum. c^2—c^4. tuberculum majus. c^2. Upper muscular mark, *impressio muscularis prima tuberculi majoris. c^3. impressio secunda. c^4. impress. tertia. C. superfic. posterior. c^5. superfic. externa. c^6. condylus externus. c^7. condylus internus. c. fossa posterior s. sinus maximus oss. humeri.*

D. Small bone of the Fore Arm, *radius.*

d. capitulum et circumferentia articularis radii. d^1. collum. d^2. tuberositas radii. d^3. Dorsal surface, *superf. dorsalis s. posterior. d^4. superfic. radialis s. externa. d^5. crista radii. d^6. process. styloideus. d^7. d^8. d^9.* Process for extens. tendons, *sulci tendinum extens. manus.*

E. Cubit, *ulna.*

e. Olecranon and Tuberosity, *process. anconeus s. olecranon, et tuberositas olecrani. e^1. superf. dorsalis. e^2. superf. ulnaris s. interna. e^3. crista ulnæ. e^4. process. styloideus. e^5. sulcus tendinis m. ulnaris interni.*

Bones of the Hand, *ossa manus.*

F. os naviculare. G. lunatum. H. triquetrum. I. pisiforme. K. multangulum majus. L. multangulum minus. M. capitatum. N. hamatum.

Bones of the Lower Extremities, *ossa extremitatum inferiorum.*

A. Thigh Bone, *os femoris.*

a. caput et collum femoris. a^1. trochanter major. a^2. trochanter minor. a^3. linea intertrochanterica posterior. a^4. a^5. a^6. Rough line, *linea aspera s. angulus posterior. a^7. superf. externa. a^8. superficies interna. a^9. superfic. articularis condyli externi. a^{10}. condyli interni. a^{11}. tuberositas condyli externi. a^{12}. tuberositas condyli interni. a^{13}.* Condyloid pit, *fossa condylorum posterior s. poples,* Knee Cap. *a^{14}. cartilagines semilunares genu.*

B. Splint Bone, *fibula.*

b. capitulum fibulæ. b^1. superf. posterior. b^2. crista fibulæ. b^3. superf. externa. b^4. process. malleolaris externus.

C. Shin Bone, *tibia.*

c. condylus externus. c^1. condylus internus. c^2. superf. posterior. c^3. angulus internus. c^4. angulus externus. c^5. malleolus internus. c^6. sulcus malleoli interni. a^7. cavitas peronea.

Bones of the Foot, *ossa pedis.*

D. talus. d. superfic. articularis interna s. tibialis. d^1. superf. articularis anterior. d^2. superf. articularis superior. d^3. superf. articularis interna s. peronea. E. calcaneus. e. superficies interna. e^1. superf. inferior. e^2. processus internus s. sustentaculum cervicis tali. e^3. tuberculum internum s. majus. e^4. tuberculum externum s. minus. e^5. Hinder surface or tuberosity, *tuberositas calcanei. e^6. superf. externa. F. os naviculare. H. cuneiforme secundum. I. cuneiforme tertium. K. cuboideum.*

FIRST BODY OF LIGAMENTS.

C.

FRONT VIEW.

HEAD, *caput.*

1. *os frontis.* 2. *os parietale.* 3. *ossa triquetra.* 4. *os occipitis.* 5. 6. *os temporum.* 7. Cartilage of the Ear, *cartilago auriculæ.* 8. Capsular membrane of the Lower Jaw, *membrana capsularis maxillæ inferioris.* 9. 11. *os zygomaticum.* 10. *Ala major ossis sphenoidei.* 12. 13. Orbits, *fossæ orbitales.* 14. *os nasale.* 15. Nasal Cartilages, *cartilagines nasi externi.* 16. *os maxillare superius.* 17. 18. 19. 20. 21. *maxilla inferior.*

TRUNK, *truncus.*

22. *vertebræ colli.* 23. *costæ veræ.* 24. *costæ spuriæ.* 25. *sternum.* 26. *vertebræ lumbales.* 27. *os sacrum.* 28. *os ilium.* 29. *os pubis.* 30. *os ischium.* 31. *symphysis ossium pubis.* 32. *tuberositas ischii.* 33. *crista ossis ilii.* 34. Obturator Ligament, *lig. obturatorium.* 35. Sacro-spinous Ligament, *lig. sacro-spinosum.* 36. Sacro-Ischiatic Ligament, *lig. sacro-tuberosum.*

a. a. a. Common anterior Ligament of the Spine, *fascia longitudinalis anterior s. ligamentum corporis vertebrarum commune anterius.* *b.* Interclavicular Ligament, *lig. interelavieulare.* *e.* External Ligaments of the Neck of the Rib, *lig. cervicis costæ externa.* c^1. Capsular Ligaments of the Heads of the Ribs, *lig. capsularia capitulorum costarum.* *d.* Radiated Ligaments of the Costal cartilages and Breast bone, *lig. cartilaginum eostarum et sterni radiatim disjecta.* *e.* Ligaments of the Ensiform Cartilage, *lig. cartilaginis xiphoideæ.* *f.* The divided limb of the Diaphragm connected with the *fascia longitudinalis anterior columnæ vertebralis.* *g.* Internal Ligament of the Neck of the Rib, *ligamentum cervicis costæ internum.* *h.* Intertransverse Ligaments, *lig. intertransversalia.* *i.* Anterior superior, and inferior Pelvic Ligament, *lig. pelvis anticum superius et inferius.* *k. foramina sacralia anteriora.* *m. incisura ischiadica major.* *n. foramen obturatorium.* *o. o.* The Capsular Membrane of the Thigh, *membrana capsularis femoris,* cut open and turned back. *p. labrum cartilagineum acetabuli.* *q.* Intervertebral Ligament, *lig. intervertebrale.*

UPPER EXTREMITIES, *extremitates superiores.*

37. *clavicula.* 38. *scapula.* 39. *acromion.* 40. *proeessus coraeoideus.* 41. *humerus.* 42. *tuberculum minus.* 43. *tubereulum majus ossis humeri.* 44. *caput o. h.* 45. *condylus internus o. h.* 46. *radius.* 47. *extremitas superior.* 48. *tuberositas radii.* 49. *extremitas inferior.* 50. *processus styloideus radii.* 51. *ulna.* 52. *olecranon.* 53. *proeessus coronoideus.* 54. *Capitulum ulnæ.* 55. *proeessus styloideus.* 56. *vola manus.* 57. *os pisiforme.* 58. *os hamatum.* 59. *os multangulum*

majus s. trapezium. 60. *ossa metacarpi.* 61. 62. 63. *phalanges digitorum.* 64. *dorsum manus.* 65. *os naviculare.* 66. *os lunatum.* 67. *os triquetrum s. cuneiforme.* 68. *os multangulum majus.* 69. *os multangulum minus s. trapezoides.* 70. *os capitatum.* 71. *os hamatum.*

f. membrana capsularis extremitatis sternalis claviculæ. g. lig. claviculæ acromiale. h. lig. commune scapulæ trapezoides. i. k. lig. communc scapulæ conoideum. l. lig. scapulæ proprium anterius. m. membrana capsularis humeri. n. The divided tendon of the long head of the *M. biceps. o. membrana capsularis cubiti. p. lig. annulare radii. q. fibræ accessoriæ membranæ cubiti. r. lig. laterale internum. s. chorda transversalis cubiti. t. membrana interossea cubiti.* Hand. *u.* Superficial Ligaments of the Hand. *v.* The Anterior and Capsular Ligament, *lig. anterius et capsulare* of the Articulation of the Metacarpus and of the first Phalanx of the Index Finger, divided and turned back. *y. z. membrana capsularis phalangis secundæ et tertiæ. a. b. c. ligamenta lateralia digitorum. d.* The Anterior and Capsular Ligament, *lig. anterius et capsulare* of the first and second Phalanx of the middle finger, laid open and turned back. *x. e. os sesamoideum. f. f.* The Carpal Joint laid open. *g. h. i. k. l. m. n. lig. inter utriusque ordinis carpi ossa singula.*

Lower Extremities, *extremitates inferiores.*

1. *os. femoris.* 2. *trochanter major.* 3. *trochanter minor.* 4. *caput.* 5. *collum.* 6. 7. *condyli oss. femoris.* 8. *patella.* 9. *tibia.* 10. 11. *condyli.* 12. *tuberositas tibiæ.* 13. *mallcolus internus.* 14. Ankle Joint. 15. *fibula.* 16. *extremitas superior.* 17. *capitulum fibulæ.* 18. *extremitas inferior.* 19. *malleolus externus.* 20. *calcaneus.* 21. *astragalus.* 22. *os naviculare.* 23. *os cuneiforme primum.* 24. *os cuneiforme secundum.* 25. Upper surface of the foot, with the Ligaments of the Tarsus and Metatarsus. 26. *tubcrculum oss. metatarsi digiti minimi.* 27. Divided tendon of the *M. tibialis posticus.* 28. *ossa metatarsi.* 29. 30. 31. 32. 33. *phalanges digitorum.*

a. membrana capsularis femoris. b. lig. laterale externum genu. c. lig. laterale internum genu. d. d. cartilages semilunares. e. Knee Joint. *f. f.* Tendon of the *M. extensor communis femoris. g. lig. patellæ. h.* Upper Articulation of the Tibia and Fibula. *i. lig. interosseum. k.* Connexion of the Tibia and Fibula. *l. m. lig. malleoli externi anticum superius et inferius. n. lig. inter fibulam et talum anterius. o. lig. deltoideum. p. membrana capsularis tali et calcanei.*

Explanation of the several Figures delineated on the same sheet with the First Ligamentous Body.*

Fig. I. Lateral view of the Articulation of the Occipital Bone, with the first and second Cervical Vertebræ, exhibited by a vertical section through the middle of the Cuneiform or Basilar process of the Occipital Bone, and the first three Cervical Vertebræ.

1. Half of the Cuneiform Process. 2. Its upper surface. 3. Internal orifice of the Anterior Condyloid Hole. 4. A part of the Occipital Hole. 5. 6. Attachments of the posterior Obturator Ligament, *lig. ob-*

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* Fig. 1. 2. 3. 4. 30. and 31. are from Clocquet's work; the other Figures are from Loder's *Anatomische Tafeln.*

turatorium posterius, to the hinder edge of the Occipital Hole, and to the hinder edge of the arch of the Atlas. 7. Lateral aperture in this Ligament for the passage of the Vertebral Artery. 8. Right half of the Intercrural Ligament of the Axis, *lig. intercrurale epistrophei.* 9. Posterior part of the arch of the Atlas. 10. Arch of the Axis. 11. Lateral aperture in the Intercrural Ligament of the Axis. 12. Odontoid or Tooth-like process cut through. 13. Right Lateral Ligament of the Odontoid process, *lig. laterale dextrum processus odontoidei.* 14. Anterior Obturator Ligament, *lig. obturatorium anterius.* 15. Anterior Ligament of the Axis, *lig. anterius inter Atlantem et epistropheum.* 18. Vertical section of the Transverse and Capsular Ligament, by which the former Ligament is connected with the hinder surface of the Odontoid process. 17. Vertical section of the fore part of the Arch of the Atlas and of the Capsular Ligament, which connects it with the anterior surface of the Odontoid process. 18. Intervertebral Hole. 19. Intercrural Ligament of the third Cervical Vertebra, *lig. intercrurale vertebræ tertiæ.* 20. 21. Arches of the second and third Cervical Vertebræ. 22. Connexion of the body of the second with that of the Third Cervical Vertebra.

Fig. II. Articulation of two Ribs on the left side with the corresponding Vertebræ.

1. 2. Fifth and sixth Ribs. 3. 4. 5. 6. Capsular Ligament of the Head of the Rib, *lig. capsulare capituli costæ*, which expands anteriorly in a radiated form. 7. External and Internal anterior Ligaments of the Rib, *lig. colli costæ internum et externum.* 8. Articular cavity for the head of the Rib in the superior Vertebra. 9. Ibid. in the inferior Vertebra. 10. Cartilaginous partition to which the *lig. teres* is attached. 11. Articular surface on the Transverse process. 12. Root of the Transverse process. 13. *lig. apicum.* 14. Anterior long Ligament, *lig. longitudinale anterius.* 15. Oblique process of the Vertebra.

Fig. III. Posterior Extremity of the Rib from the left side connected with the Bodies of the two corresponding Vertebræ, cut through vertically.

1. Portion of a Rib. 2. Body of the upper Vertebra. 3. Body of the lower Vertebra. 4. *lig. capsulare capituli costæ superius.* 5. Inferior Capsular Ligament of the Head of the Rib, *lig. cap. cost. inferius.* 6. Intervertebral substance. 7. Round Ligament of the Head of the Rib, *lig. teres capituli costæ.* 8. Anterior common Ligament. 9. Oblique process of the inferior Vertebra. 10. Its spinous process. 11. Its Transverse process.

Fig. IV. Vertical Section of the Articulation of the Scapula with the Humerus to display the interior of the Joint.

1. 1. Attachment of the Capsular Ligament, *lig. capsulare*, to the Scapula. 2. 2. Attachment of the same to the neck of the Humerus. 3. 3. Middle part of the same Ligament. 4. Inner surface. 5. Posterior half of the Glenoid Cavity. 6. Its Articular Cartilage. 7. Attachment of the tendon of the *M. biceps flexor cubiti* to the edge of the Glenoid cavity. 8. The tendon raised from its sheath. 9 The Sacciform expansion of the Sheath. 10. The same tendon without the Capsular

Ligament and Sheath. 11. Groove in the Humerus for that tendon. 12. Head of the Humerus, vertically divided through the centre. 13. Articular Cartilage of the Head of the Humerus. 14. Vertical Section through the Glenoid cavity of the Scapula. 15. A part of the Spine of the Scapula. 16. Upper angle of the Scapula. 17. Its hinder edge. 18. Anterior surface of the Scapula. 19. Its anterior edge.

Fig. V. The Coronary Ligament of the Radius, *ligamentum orbiculare radii.* (*Inner View.*)

1. The body of the Ulna. 2. The Olecranon. 3. The Coronoid Process. 4. The great Sigmoid Cavity. 5. The Tuberosity to which the tendon of the *M. brachialis anticus* 6. is attached. 7. The body of the Radius. 8. Its Head. 9. The Tuberosity, to which 10. the tendon of the *M. biceps* is attached. 11. The Coronary Ligament of the Radius. 12. The Interosseous Ligament of the Fore Arm.

Fig. VI. The same Ligament. (*Outer View.*)

1. The body of the Ulna. 2. The Olecranon. 3. The great Sigmoid Cavity. 4. The Coronoid Process. 5. The body of the Radius. 6. Its Head. 7. The Coronary Ligament of the Radius. 8. The Interosseous Ligament of the Fore Arm.

Fig. VII. The Capsular Membrane of the Wrist Joint, with the Sacciform Capsular Membrane laid open.

1. The body of the Radius. 2. Its Styloid Process. 3. That part of the articular surface of the Radius which receives the Scaphoid Bone. 4. That part of the same surface which receives the Lunar Bone. 5. The body of the Ulna. 6. Its Styloid Process. 7. The Capsular Ligament of the Wrist Joint, *membrana capsularis articuli carpi*, divided and turned back. 8. The mucous ligament, *ligamentum mucosum.* 9. The Sacciform Ligament, *membrana capsularis sacciformis.* 10. The triangular Interarticular Cartilage of the Wrist Joint, *cartilago intermedia triangularis carpi.*

Fig. VIII. The Sacciform Capsular Membrane, with the triangular Interarticular Cartilage, and the reddish Ligamentules dissected.

1. The body of the Radius. 2. Its Styloid Process. 3. The Semilunar articular cavity of the Radius, in which the rounded base of the Ulna is received. 4. The Carpal articular cavity of the Radius. 5. The body of the Ulna. 6. Its Styloid Process. 7. Its rounded Base. 8. The Sacciform Ligament, divided and turned back. 9. The triangular Interarticular Cartilage of the Wrist Joint, raised from its natural situation. 10. The reddish Ligament, *ligamentum subcruentum.*

Fig. IX. The Triangular Interarticular Cartilage of the Wrist Joint, to show its under surface which is applied to the Carpus.

1. The under surface on which the Cuneiform bone rests. 2. A part of the Capsular Ligament of the Wrist Joint.

Fig. X. The proper Volar Ligaments of the Carpus.

1. The Radius. 2. The Ulna. 3. The Trapezial Bone. 4. The Pisiform Bone. 5. The Unciform process of the Unciform Bone. 6. Part of the tendinous sheath of the *M. flexor carpi radialis*, which is attached to the Scaphoid Bone. 7—11. The five Metacarpal Bones. 12. The *M. pronator quadratus*. 13. The tendon of the *M. flexor carpi ulnaris*. 14. The tendon of the *M. extensor carpi radialis externi*. 15. The tendon of the *M. flexor carpi radialis interni*. 16. The tendon of the *M. abductor pollicis longus*. 17. The Capsular Ligament of the Wrist Joint, *membrana capsularis articuli carpi*. 18. The Mucous Ligament, *membrana mucosa*. 19. The proper Volar Ligament of the Carpus, *lig. carpi proprium volare*. 20. A ligamentous band which passes from the Radius to the *M. flexor carpi radialis*. 21. Ligaments which pass from the Pisiform Bone to the proper Volar Ligament of the Carpus. 22. The Ligament between the Pisiform and Unciform Bones, *lig. inter os pisiforme et hamatum*. 23. The straight Ligament, between the Pisiform and the fifth Metacarpal bones, *lig. rectum inter os pisiforme et metacarpi quintum*. 24. The Ligament between the Unciform bone and the base of the fifth Metacarpal, *lig. inter os hamatum et basin metacarpi quinti*. 25. The Capsular membrane of the fifth Metacarpal bone, *membrana capsularis ossis metacarpi quinti*. 26. The Volar Ligament of the capsule of the Metacarpal bone of the Thumb, *lig. accessorium volare membranæ capsularis ossis metacarpi pollicis*. 27. The Internal Lateral Ligament, *lig. accessorium laterale internum*, of the same capsule. 28. The Volar Ligament, between the base of the second and third Metacarpal bones, *lig. volare inter basin ossis metacarpi indicis et medii*. 29. The Volar Ligament, between the bases of the third and fourth Metacarpal bones, *lig. volare inter basin metacarpi annularis et medii*. 30. The Volar Ligament between the bases of the fourth and fifth Metacarpal bones, *lig. volare inter basin metacarpi auricularis et annularis*.

Fig. XI. The Palm of the Hand, with the Capsular Membrane of the Carpus, and the several superficial Ligaments.

1. The Radius. 2. The Ulna. 3. The Membrane between the bones of the fore arm. 4. The Groove on the inside of the front of the Radius, in which lies the tendon of the *M. abductor longus* and *M. extensor brevis pollicis*. 5. The Scaphoid bone, which is here hidden. 6. The Lunar Bone, which is here also hidden. 7. The Cuneiform Bone, also hidden. 8. The Pisiform Bone, which is surrounded with its Capsular membrane. 9. The Prominence of the Trapezial Bone. 10. The Base of the Great Bon . 11. The Hook of the Unciform Bone. 12—16. The five Metacarpal Bones. 17—20. The first Joint of the Index, Middle, Ring and Auricular Fingers. 21. The tendon of the *M. flexor carpi radialis*. 22. Strong fibres passing from the Styloid process of the Radius to the Scaphoid Bone. 23. Fibres which pass from the edge of the Articular Cartilage of the Radius to the neck of the Great Bone. 24. Fibres which pass from the same edge of the Radius to the Lunar Bone. 25. Fibres passing from the edge of the Ulna to the Pisiform Bone. 26. Fibres from the Styloid process of the Ulna to the Pisiform Bone. 27. Fibres passing from the Scaphoid and Trapezial to the Great Bone. 28. Fibres running from the Pisiform and Unciform to the Great Bone.

29. The triangular Ligament between the Trapezial and Great Bone, *lig. triangulare inter os multangulum majus et capitatum.* 30. The Lesser superficial Ligament of the third Metacarpal Bone, *lig. sublime minus ossis metacarpi tertii.* 31. The Greater superficial Ligament of the third Metacarpal Bone, *lig. sublime majus ossis metacarpi tertii.* 32. The superficial Ligament of the second Metacarpal Bone, *lig. sublime ossis metacarpi indicis.* 33. The part at which the tendon of the *M. flexor carpi radialis* is attached to the base of the second Metacarpal Bone. 34. The Ligament between the Pisiform and Unciform Bone, *lig. inter os pisiforme et hamatum.* 35. The straight Ligament between the Pisiform and the fifth Metacarpal Bone, *lig. rectum inter os pisiforme et metacarpi quintum.* 36. The Ligament between the Unciform Bone and the base of the fifth Metacarpal Bone, *lig. inter os hamatum et basin metacarpi quinti.* 37. The Capsular membrane of the fifth Metacarpal Bone, *membrana capsularis ossis metacarpi quinti.* 38. The Volar Ligament between the base of the third and the fifth Metacarpal Bone, *lig. volare inter basin ossis metacarpi auricularis et medii.* 39. The Volar Ligament between the base of the fourth and fifth Metacarpal Bone, *lig. volare inter basin ossis metacarpi auricularis et annularis.* 40. The Volar Ligament between the base of the third and fourth Metacarpal Bone, *lig. volare inter basin ossis metacarpi annularis et medii.* 41. The Volar Ligament between the base of the second and third Metacarpal Bone, *lig. volare inter basin ossis metacarpi indicis et medii.* 42. The Volar Ligament of the Capsular Membrane of the first Metacarpal Bone, *lig. accessorium volare membranæ capsularis ossis metacarpi pollicis.* 43. The Inner Lateral Ligament, *lig. accessorium laterale internum*, of the same Membrane. 44. The Ligaments between the Heads of the Metacarpal Bones, *ligamenta inter capitula ossium metacarpi.* 45. The Capsular Membrane of the first Joint of the Finger, and of the Metacarpal Bone, *membrana capsularis phalangis primæ et ossis metacarpi.*

Fig. XII. The back of the Carpus, with the superficial Ligaments.

1. The Radius. 2. The Ulna. 3. The Scaphoid Bone. 4. The Lunar Bone. 5. The Cuneiform Bone. 6. The Trapezial Bone. 7. The Trapezoid Bone. 8. The Great Bone. 9. The Unciform Bone. 10—14. The five Metacarpal Bones. 15. The tendon of the *M. abductor pollicis longus.* 16. The tendon of the *M. extensor carpi ulnaris.* 17. Strong Fibres of the Capsular membrane of the Wrist Joint, which pass from the edge of the Articular cavity of the Radius to the Cuneiform Bone. 18. Similar fibres passing from the Styloid process of the Ulna to the Cuneiform Bone. 19. Oblique fibres passing from the Cuneiform to the Great and to the Trapezoid Bones. 20. Fibres passing from the Cuneiform to the Unciform Bone. 21. Fibres passing from the Groove of the Scaphoid Bone to the Trapezial Bone. 22. Fibres passing from the Scaphoid to the Trapezoid Bone. 23. The Dorsal Ligament between the Trapezial and Trapezoid Bones, *ligamentum dorsale inter os multangulum majus et minus.* 24. The Dorsal Ligament between the Trapezoid and the Great Bone, *lig. dorsale inter os multangulum minus et capitatum.* 25. The Dorsal Ligament between the Great and the Unciform Bones, *lig. dorsale inter os capitatum et hamatum.* 26. The Capsular membrane of the fifth Metacarpal Bone, *membrana capsularis ossis metacarpi quinti.* 27. The Dorsal Ligament of the Capsular Membrane

of the first Metacarpal Bone, *lig. accessorium dorsale membranæ capsularis ossis metacarpi pollicis*. 28. The external Lateral Ligament, *lig. accessorium laterale externum*, of the same Capsular Membrane. 29. The Ligament between the Trapezial and the second Metacarpal Bone, *lig. inter os multangulum majus et metacarpi secundum*. 30. The Ligament between the Trapezoid and the second Metacarpal Bone, *lig. inter os multangulum minus et metacarpi secundum*. 31. The Ligament between the Trapezoid Bone and the third Metacarpal Bone, *lig. inter os multangulum minus et metacarpi tertium*. 32. The Ligament between the Great and the third Metacarpal Bone, *lig. inter os capitatum et metacarpi tertium*. 33. The Ligament between the Great and the fourth Metacarpal Bone, *lig. inter os capitatum et metacarpi quartum*. 34. The Ligament between the Unciform and the fourth Metacarpal Bone, *lig. inter os hamatum et metacarpi quartum*. 35. The Dorsal Ligament of the base of the second and third Metacarpal Bones, *lig. dorsale baseos ossis metacarpi secundi et tertii*. 36. The Dorsal Ligament of the base of the third and fourth Metacarpal Bones, *lig. dorsale baseos ossis metacarpi tertii et quarti*. 37. The Dorsal Ligament of the base of the fourth and fifth Metacarpal Bones, *lig. dorsale baseos ossis metacarpi quarti et quinti*. 38—41. The Lateral Ligament of the base of the Metacarpal Bones, *lig. lateralia baseos ossium metacarpi*.

Fig. XIII. The Volar Ligaments of the Carpus seen after the removal of the Capsular Membrane.

1. The Radius. 2. The Ulna. 3. The Interosseous Membrane of the Fore Arm. 4. The Scaphoid Bone. 5. The Lunar Bone. 6. The Cuneiform Bone. 7. The Pisiform Bone. 8. The Trapezial or great Quadrangular Bone. 9. Its groove. 10. The Trapezoid or lesser Quadrangular Bone. 11. The Base of the Great Bone. 12. Its Head. 13. The Hook of the Unciform Bone. 14–18. The five Metacarpal Bones. 19. Ligamentous fibres which pass from the edge of the Articular Cavity of the Radius to the Lunar Bone. 20. Fibres, which pass from the edge of the Interarticular or Triangular Cartilage to the junction of the Lunar and Cuneiform or Triangular Bone. 21. The Ligament between the Lunar and Cuneiform Bones, *lig. inter os lunatum et triquetrum*. 22. The Ligament between the Cuneiform and Great Bone, *lig. inter os triquetrum et capitatum*. 23. The Ligaments between the Great and Unciform Bone, *lig. inter os capitatum et hamatum*. 24. The Transverse Ligament between the Unciform and the third Metacarpal Bone, *lig. transversum inter os hamatum et metacarpi tertium*. 25. The straight Ligament between the Pisiform and the fifth Metacarpal Bone, *lig. rectum inter os pisiforme et metacarpi quintum*. 26. A bundle of ligamentous fibres which pass from this Ligament to the base of the third and fourth Metacarpal Bones. 27. The Ligament between the Pisiform and Unciform Bone, *lig. inter os pisiforme et hamatum*. 28. The Oblique Ligament between the Scaphoid and the Great Bone, *lig. obliquum inter os naviculare et capitatum*. 29. The Ligament between the Trapezoid and the Great Bone, *lig. inter os multangulum minus et capitatum*. 30. The deep Ligament between the Trapezoid and the third Metacarpal Bone, *lig. profundum inter os multangulum majus et metacarpi tertium*. 31. The tendon of the *M. flexor carpi radialis* turned aside. 32. The tendon of the *M. abductor pollicis longus*. 33. The Capsular Membrane of the

Metacarpal Bone of the Thumb, *membr. capsularis ossis metacarpi pollicis.* 34. The Volar Ligament between the base of the second and third Metacarpal Bones, *lig. volare inter basin ossis metacarpi indicis et medii.* 35. The Volar Ligament between the base of the third and fourth Metacarpal Bones, *lig. volare inter basin metacarpi annularis et medii.* 36. The Volar Ligament between the base of the fourth and fifth Metacarpal Bones, *lig. volare inter basin metacarpi auricularis et annularis.*

Fig. XIV. The Deep Volar Ligaments of the second and third Metacarpal Bones.

1. The Scaphoid Bone. 2. The Lunar Bone. 3. The Trapezial Bone. 4. Its Groove. 5. The Trapezoid Bone. 6. The Great Bone. 7. The Unciform Bone. 8. Its Unciform process. 9. The second Metacarpal Bone. 10. The third Metacarpal Bone. 11. The Tendon of the *M. flexor carpi radialis* drawn back. 12. The great superficial Ligament of the third Metacarpal Bone turned back. (vide Fig. 11. 31.) 13. The Deep Ligament between the Trapezial and the third Metacarpal Bone turned back. (vide Fig. 13. 30.) 14. The Volar Ligament between the base of the second and third Metacarpal Bone, *lig. volare inter basin ossis metacarpi indicis et medii.* 15. The Deep Ligament between the Trapezoid and the second Metacarpal Bone, *lig. profundum inter os multangulum minus et metacarpi secundum.* 16. Another small Ligament which, in this preparation, passes from the Trapezoid Bone to the second Metacarpal Bone. 17. The Ligament between the Trapezial and the second Metacarpal Bone (vide Fig. 12. 29.) seen on the side.

Fig. XV. Posterior view of the second and third Metacarpal Bones, and some of the Carpal Bones, with their Ligaments.

1. The Scaphoid Bone. 2. The Lunar Bone. 3. The Trapezoid Bone. 4. The Great Bone. 5. The Unciform Bone, which is a little separated from the Great Bone. 6. The second Metacarpal Bone. 7. The third Metacarpal Bone. 8. The Cubital Ligament between the Scaphoid and the Lunar Bones, *lig. cubitale inter os naviculare et lunatum.* 9. The Dorsal Ligament between the Trapezoid and the Great Bone, *lig. dorsale inter os multangulum minus et capitatum.* 10. The Lateral Transverse Ligament between the Great and the Unciform Bone, *lig. laterale transversum inter os capitatum et hamatum.* 11. The Straight Perpendicular Ligament of the third Metacarpal Bone, *lig. rectum perpendieulare ossis metacarpi tertii.*

Fig. XVI. Posterior view of the first and second row of the Carpal Bones, separated from each other.

1. The Capsular Membrane of the Wrist Joint dissected and turned back. 2. The surface of that part of the Membrane by which both rows of the Carpal Bone are connected in the palm of the Hand. 3. The Scaphoid Bone. 4. The Lunar Bone. 5. The Cuneiform Bone. 6. The Trapezial Bone. 7. The Trapezoid Bone. 8. The Neck of the Great Bone. 9. Its Head. 10. The Unciform Bone. 11. The Mucous Ligamentules of the Common Membrane, *ligamentula mucosa membranæ communis*, which go to the Lunar and Cuneiform Bone. 12. Another Mucous Ligamentule which is fixed to the Great Bone.

Fig. XVII. The first row of the Carpal Bones bent down from their place in the Joint.

1. The outer surface of the Radius. 2. The inner surface of the Ulna. 3. The Sacciform Capsular Membrane, *membranæ capsularis sacciformis.* 4. That part of the Articular Cavity of the Radius which receives the Scaphoid Bone. 5. The part of the same Cavity which receives the Lunar Bone. 6. The Triangular Interarticular Cartilage of the Carpus, *cartilago intermedia triangularis carpi.* 7. The Scaphoid Bone. 8. The Lunar Bone. 9. The Cuneiform Bone. 10. The Capsular Membrane of the Wrist Joint dissected and turned back. 11. The inner surface of that part of the Capsular Membrane by which the Bones of the Carpus are connected in the palm of the Hand. 12. Fibres which pass from the edge of the Articular Cavity of the Radius to the neck of the Great Bone. 13. Fibres which pass from the same edge to the Lunar Bone. 14. The Mucous Ligament, *ligamentum mucosum*, which passes from the same edge to the Cubital Ligament between the Scaphoid and Lunar Bone. 15. The Cubital Ligament between the Scaphoid and Lunar Bone, *lig. cubitale inter os naviculare et lunatum.* 16. The Cubital Ligament between the Lunar and Cuneiform Bone, *lig. cubitale inter os lunatum et triquetrum.* 17. Fibres which pass from the edge of the Triangular Interarticular Cartilage to the junction of the Lunar and Cuneiform Bone.

Fig. XVIII. The Index Finger and its Metacarpal Bone with their Ligaments seen from the Radial side.

1. The Metacarpal Bone. 2. The first Phalanx of the Finger. 3. The second Phalanx. 4. The third Phalanx. 5. The Capsular Membrane of the first Joint. 6. Ibid. of the second Joint. 7. Ibid. of the third Joint. 8. The Radial Lateral Ligament of the first Joint, *lig. laterale radiale junctura phalangis primæ.* 9. The radial Lateral Ligament of the second Joint, *lig. laterale radiale junctura phalangis secundæ.* 10. The Radial Lateral Ligament of the third Joint, *lig. laterale radiale junctura phalangis tertiæ.*

Fig. XIX. The Index Finger with the connecting fibres of the Tendons.

1. The Metacarpal Bone. 2. The first Phalanx. 3. The second Phalanx. 4. The third Phalanx. 5. The tendon of the *M. flexor digitorum perforatus.* 6. Its slips which are inserted into the second Phalanx. 7. The Tendon of the *M. flexor digitorum perforans.* 8. The common Membrane or Sheath of the tendon of the flexing Muscles, *membrana ligamentis tendinum communis*, slit up and turned aside. 9. The short connecting fibres, *vinculum accessorium breve*, of the tendon of the *M. flexor perforans.* 10. The short connecting fibres of the *M. flexor perforatus.* 11. The long connecting fibres of the tendon of the *M. flexor perforans.* 12. The long connecting fibres of the *M. flexor perforatus.* 13. The common connecting fibres of both tendons.

Fig. XX. Anterior view of the Breast Bone, the Collar Bone, and the Cartilages of the Ribs with their Ligaments.

1. The Handle of the Breast Bone. 2. Its Body. 3. The Ensiform Cartilage. 4–10. The Cartilages of the first, second, third, fourth, fifth, sixth, and seventh Ribs. 11. The Collar Bone. 12. The Ligament

between the Collar Bones, *lig. interclaviculare.* 13. The Capsular Membrane of the anterior extremity of the Collar Bone, *membrana capsularis extremitatis sternalis claviculæ.* 14. The Ligament between the Collar Bone and the Cartilage of the first Rib, *lig. inter claviculam et cartilaginem costæ primæ.* 15. The Shining Ligaments between the Cartilages of the Ribs. 16. The Radiated Ligamentules of the Ribs, *ligamentula costarum radiatim disjecta,* with which the Capsular Membrane of the Cartilages of the Ribs, *membr. capsularis cartilaginum costarum,* is covered. 17. The Ligaments of the Ensiform Cartilage, *lig. cartilaginis xiphoideæ.*

Fig. XXI. Posterior view of the Breast Bone, Collar Bone, and Cartilages of the Ribs with their Ligaments.

1–14. As in Fig. XX. 15. Ligaments of the Ensiform Cartilage. 16. The *m. intercostalis internus.* 17. The internal Membrane of the Breast Bone, *membr. sterni interna.*

Fig. XXII. The Interarticular Cartilage of the left Collar Bone, and of the Breast Bone in its natural position.

1. The inner surface of the Handle of the Breast Bone. 2. The Cartilage of the first Rib. 3. The Collar Bone. 4. The Capsular Membrane of the anterior extremity of the Collar Bone. 5. The Interarticular Cartilage of the Collar Bone, and Breast Bone, *cartilago interarticularis claviculæ et sterni.* 6. The Ligament between the Collar Bones. — The Interarticular Cartilage lies in the Clavicular Cavity of the Breast Bone.

Fig. XXIII. The Interarticular Cartilage of the right Collar Bone, and Breast Bone, removed from its natural situation.

1–6. As in the preceding Figures. — The Interarticular Cartilage is removed from its place. The upper or inner point is attached to the Collar Bone, but the under point to the Breast Bone and Cartilage of the first Rib.

Fig. XXIV. The Interarticular Cartilage of the Collar Bone and Acromion.

1. The Collar Bone. 2. The Capsular Membrane of the posterior extremity of that Bone, *membrana capsularis extremitatis scapularis claviculæ.* 3 The Interarticular Cartilage, *cartilago interarticularis claviculæ et acromii.*

Fig. XXV. Anterior view of the Pelvis and its Ligaments.

1. The Body of the third Lumbar Vertebra. 2. Its Transverse process. 3. The Body of the fourth Lumbar Vertebra. 4. Its Transverse process. 5. The Body of the fifth Lumbar Vertebra. 6. Its Transverse process. 7. The first false Vertebra of the Sacrum. 8. The second ditto. 9. The third ditto. 10. The fifth Lumbar hole. 11. The first Anterior Sacral hole. 12. The second ditto. 13. The Great Ischiatic Notch. 14. The Superior Anterior Spinous process of the Ilium. 15. The Inferior Anterior Spinous process of the same Bone. 16. The Anterior Notch of this Bone. 17. The Horizontal Branch of the Pubis.

18. Its Spinous process. 19. The Descending Branch of the Pubis. 20. The Ascending Branch of the Ischium. 21. The Tuberosity of that Bone. 22. Its Descending Branch. 23. The Cotyloid Cavity or Acetabulum. 24. The tip of the Coccyx. 25. The Intervertebral substance of the third and fourth Lumbar Vertebra. 26. Ibid. of the fourth and fifth Lumbar Vertebra. 27. Ibid. of the fifth Lumbar, and the first false Vertebra of the Sacrum. 28. The Superior Anterior Pelvic Ligament, *lig. pelvis anticum superius*. 29. The Inferior Anterior Pelvic Ligament, *lig. pelvis anticum inferius*. 30. The Accessory Membrane, *membrana accessoria*. 31. The Ligamentous Band, *lacertus ligamentosus*, which, arising from the Body of the fourth Lumbar Vertebra, runs in an arched form along the upper edge of the Horizontal Branch of the Pubis, and at last terminates in the Spinous process of that Bone. 32. The Membrane of the Oval hole, *membr. obturatoria*. 33. The Aperture, *hiatus*, in this Membrane. 34. The Pubic Symphysis, *synchondrosis ossium pubis*. 35. The Annular Ligament, *lig. annulare*, of the Pubis. 36. The Anterior Sacro-Coccygeal Ligament, *lig. sacro-coccygeum anterius*. 37. The Cartilaginous Lip, *labrum cartilagineum*, of the Acetabulum. 38. The Notch, *incisura*, in the Acetabulum. 39. The Fallopian Ligament, *lig. fallopii*.

Fig. XXVI. Posterior view of the Pelvis, with its Ligaments.

1. The Superior Oblique process of the third Lumbar Vertebra. 2. Its Transverse process. 3. Its Spinous process. 4. The Transverse process of the fourth Lumbar Vertebra. 5. Its Spinous process. 6. The Transverse process of the fifth Lumbar Vertebra. 7. Its Spinous process. 8. The connexion of the Oblique processes of the third and fourth Lumbar Vertebra. 9. The connexion of the fourth and fifth Lumbar Vertebra. 10. The connexion of the fifth Lumbar and first false Vertebra of the Sacrum. 11. The first posterior Sacral hole. 12. The second ditto. 13. The third ditto. 14. The archlike termination of the Vertebral Canal. 15. The third false Transverse process of the Sacrum. 16. The fourth ditto. 17. The fifth ditto. 18. The Coccygeal process of the Sacrum. 19. The false Transverse process of the Coccyx. 20. The Horn of the Coccyx. 21. The fourth false Vertebra of that Bone. 22. The Crest of the Ilium. 23. Its Superior Anterior Spinous process. 24. Its Superior Posterior Spinous process. 25. The Inferior Posterior Spinous process. 26. The Great Ischiatic Notch. 27. The Descending Branch of that Bone. 28. The Spinous process. 29. The Tuberosity. 30. The Ascending Branch of the Ischium. 31. The Lesser Ischiatic Notch. 32. The Descending Branch of the Pubis. 33. Its Horizontal Branch. 34. The edge of the Cotyloid Cavity. 35. The Membrane of the Oval hole, *membrana obturatoria*. 36. The Annular Ligament, *lig. annulare*, of the Pubis. 37. The Superior Anterior Pelvic Ligament, *lig. pelvis anticum superius*. 38. The Inferior Anterior Pelvic Ligament, *lig. pelvis anticum inferius*. 39. The Accessory Membrane, *membrana accessoria*. 40. The Long Posterior Ligament of the Ilium, *lig. posticum longum ossis ilii*. 41. The Short Posterior Ligament, *lig. posticum breve*, of the same Bone. 42. Irregular Posterior Ligaments, *lig. vaga postica*, of the same Bone. 43. Point at which the Spinous Ligament of the Vertebra is generally lost. 44. The Membrane with which the lower extremity of the Vertebral Canal is covered. 45.

The Long Posterior Ligament of the Coccyx, *lig. sacro-coccygeum posticum longum.* 46. The Short Posterior Ligament of the same Bone, *lig. sacro-coccygeum posticum breve.* 47. The Ligamentous Membrane which passes from the fifth false Transverse process of the Sacrum to the false Transverse process of the Coccyx. 48. The Ligament between the Tuberosity of the Ischium and the Sacrum. 49. Its Falciform elongation, *productio falciformis.* 50. The Ligament between the Spinous process of the Ischium and the Sacrum, *lig. spinoso-sacrum.*

Fig. XXVII. Internal view of half the Pelvis, with its Ligaments.

1. The fourth Lumbar Vertebra. 2. Its Transverse process. 3. Its Spinous process. 4. The fifth Lumber Vertebra. 5. Its Transverse process. 6—10. The five false Vertebræ of the Sacrum. 11—14. The four anterior Sacral holes. 15. The Lateral wing of the Sacrum. 16. The Lateral Articular surface of the same Bone. 17—20. The four false Vertebræ of the Coccyx. 21. The Crest of the Ilium. 22. Its Superior Anterior Spinous process. 23. Its Inferior Anterior Spinous process. 24. The Horizontal Branch of the Pubis. 25. Its Spinous process. 26. The Unnamed Line, *linea iliopectinea*, of the Ilium. 27. The Pubic Cartilage, together with its surrounding Annular Ligament cut through. 28. The Descending Branch of the Pubis. 29. The Ascending Branch of the Ischium. 30. Its Descending Branch. 31. Its Tuberosity. 32. Its Spinous process. 33. Its Lesser Ischiatic Notch. 34. Its Great Notch. 35. The Cartilaginous connexion of the Ilium and Sacrum. 36. Intervertebral substances, *cartilagines intervertebrales.* 37. The Ligament between the Tuberosity of the Ischium and Sacrum, *lig. tuberoso-sacrum.* 38. The Falciform process, *productio falciformis*, of this Ligament. 39. The Ligament between the Spinous process of the Ischium and the Sacrum, *lig. spinoso-sacrum.* 40. The Anterior Ligament of the Coccyx, *lig. coccygeum anterius.* 41. The Membrane of the Oval hole, *membr. obturatoria.* 42. The Aperture, *hiatus*, in this Membrane. The right Os Innominatum has been removed.

Fig. XXVIII. Posterior View of the Pubic Bones of a Woman who had died at the end of her pregnancy.

1. The Gelatino-cartilaginous Substance, *substantia gelatinoso-cartilaginea*, of the left Pubis which is found in the middle of the Cartilaginous connexion, *synchondrosis.* 2. The same substance on the right side. 3. The divided Annular Ligament, *lig. annulare.*

The substance close to the Annular Ligament is cartilaginous.

Fig. XXIX. Longitudinal section of the Bones of a Female, of twenty-two years old, who had drowned herself in the sixth month of her pregnancy.

1. The Crest of the Pubic Bone. 2. The Spinous process. 3. The Horizontal Branch. 4. The Descending Branch. 5. The Arch. 6. The bony cells. 7. The Pubic Cartilage in the midst of which is a cleft.

Fig. XXX. The Bones of the Carpus with the upper extremity of the Metacarpus divided longitudinally, in order to show the numerous Articular connections of these Bones.

1. The Scaphoid Bone. 2. The Lunar Bone. 3. The Cuneiform Bone. 4. The Pisiform Bone. 5. 6. The Interosseous Ligaments, *lig. interossea*, of these Bones. 7. The Trapezial Bone. 8. The Trapezoid Bone. 9. The Great Bone. 10. The Unciform Bone. 11—15. The Metacarpal Bone.

Fig. XXXI. Perpendicular Section of the Index Finger with the Capsular Ligaments of its Joints.

1. Lower extremity of the Metacarpal Bone. 2. Capsular Ligament of the first Joint, *lig. capsulare phalangis primæ*. 3. Bone of the first Phalanx. 4. Capsular Ligament of the second joint, *lig. caps. phalangis secundæ*. 5. Bone of the second Phalanx. 6. Capsular Ligament of the third Joint, *lig. caps. phal. tertiæ*. 7. Bone of the third Phalanx.

Fig. XXXII. The Capsular Membrane of the Knee Joint viewed from the outside, together with the Long External Lateral Ligament of the Knee.

1. The Os Femoris. 2. The Tibia. 3. The Fibula. 4. The membrane between the latter two Bones, *membrana interossea cruris*. 5. The Patella. 6. The tendon of the *M. rectus femoris*, and of the *M. cruralis*. 7. The tendon of the *M. vastus externus*. 8. The tendon of the *M. biceps flexor cruris*, cut through and turned back. 9. The Ligament of the Patella. 10. The Capsular Membrane of the Knee Joint which is covered with the tendinous fibres of the neighboring Muscles, and with the sheath of the thigh, *fascia lata*. 11. The Long External Lateral Ligament of the Knee, *lig. laterale genu externum longum*.

Fig. XXXIII. The Capsular Membrane of the Knee Joint viewed on the inside, with the Internal Lateral Ligament.

1. The Os Femoris. 2. The Tibia. 3. The Patella. 4. The tendon of the *M. rectus femoris* and of the *M. cruralis* turned back. 5. A portion of the tendon of the *M. vastus internus*. 6. The tendon of the *M. gastrocnemius internus*. 7. The tendon of the *M. semimembranosus*. 8. A part of the Femoral sheath turned aside. 9. The Capsular Membrane of the Knee Joint, *membr. capsularis genu*. 10. The Internal Lateral Ligament of the Knee Joint, *lig. laterale genu internum*. 11. The Ligament of the Patella, *lig. patellæ*.

Fig. XXXIV. The Popliteal Ligament with the Short External Lateral Ligament of the Knee, and the Ligaments of the Head of the Fibula.

1. The Os Femoris. 2. The Tibia. 3. The Fibula. 4. The Membrane between the Bones of the leg, *membr. interossea cruris*. 5. The tendon of the *M. gastrocnemius externus*, turned back. 6. The tendon of the *M. biceps flexor cruris*. 7. The tendon of the *M. gastrocnemius internus*. 8. The tendon of the *M. semimembranosus*. 9. The tendon of the *M. semitendinosus*. 10. The tendon of the *M. gracilis*. 11. The Popliteal Ligament, *lig. popliteum*. 12. The Capsular Membrane of the Knee Joint. 13. The Short External Lateral Ligament, *lig. laterale genu externum breve*. 14. The Capsular Membrane of the head of the Fibula, *membr. capsularis capituli fibulæ*. 15. Strengthening fibres of this Membrane.

Fig. XXXV. The Mucous Ligaments of the Knee with the Alar Ligaments.

1. The Articular surface of the Inner Condyle of the Os Femoris. 2. The Articular surface of the Outer Condyle. 3. The Articular surface of the Patella. 4. The tendon of the *M. vastus internus*, divided. 5. The tendon of the *M. vastus externus*, divided. 6. The Inner Semilunar Cartilage, *cartilago lunata*. 7. The Outer Semilunar Cartilage. 8. The Mucous Ligament of the Knee, *lig. mucosum genu*. 9. The fatty glandular mass which is enveloped in a process of the Mucous Ligament. 10. The Great Alar Ligament, *lig. alare majus*. 11. The Lesser Alar Ligament.

Some part of the Crucial ligaments are here seen.

Fig. XXXVI. Anterior view of the Crucial Ligaments of the Knee, together with the Ligaments of the Head of the Fibula, and the Ligaments of the Patella.

1. The Articular surface of the Inner Condyle of the Thigh Bone. 2. The Articular surface of the Outer Condyle. 3. The Tibia. 4. Its Inner Upper Articular Cavity. 5. Its Outer Upper Articular Cavity. 6. The Fibula. 7. Its Head. 8. The tendon of the *M. flexor cruris*. 9. The anterior strengthening fibres of the Capsular Membrane of the head of the Fibula. 10. The Patella. 11. The tendon of the *M. rectus* and *crureus*. 12. The Ligament of the Patella. 13. A portion of the Capsular Membrane of the Knee Joint dissected and turned back. 14. The Inner Semilunar Cartilage. 15. The Outer Semilunar Cartilage. 16. The Anterior Crucial Ligament of the Knee, *lig. genu cruciatum anticum*. 17. The Posterior Crucial Ligament. 18. The membrane between the bones of the Leg.

Fig. XXXVII. Posterior view of the Crucial Ligaments of the Knee with the Ligaments of the Head of the Fibula.

1. The Thigh Bone. 2. The Articular surface of its Inner Condyle. 3. The Articular surface of its Outer Condyle. 4. The Tibia. 5. The Fibula. 6. Its Head. 7. The posterior strengthening fibres of the Capsular Membrane of the Head of the Fibula. 8. The tendon of the *M. gastrocnemius internus*. 9. The tendon of the *M. gastrocnemius externus*. 10. The tendon of the *M. semimembranosus*, turned back. 11. The tendon of the *M. biceps flexor cruris*, turned back. 12. The Capsular Membrane of the knee slit up and turned back. 13. The Posterior Crucial Ligament of the Knee. 14. The Anterior Crucial Ligament. 15. The Inner Semilunar Cartilage. 16. The Outer Semilunar Cartilage.

The Membrane between the Bones of the Leg has, in this instance, been removed.

Fig. XXXVIII. The Semilunar Cartilage.

1. The Tibia. 2. The Inner Upper Articular surface of the Bone. 3. The Outer Upper Articular surface. 4. The Patella. 5. The fatty glandular mass. 6. A portion of the Capsular Membrane of the Knee Joint. 7. The Anterior Crucial Ligament. 8. The Posterior Crucial Ligament. 9. The inner Semilunar Cartilage. 10. The Outer Semilunar Cartilage. 11. The Common Transverse Ligament, *lig. commune transversale*, of this Cartilage.

SECOND BODY OF LIGAMENTS.

D.

FROM BEHIND.

Head, *caput.*

1. *os bregmatis.* 2. *os occipitis.* 3. *os temporum.* 4. *os Wormianum.* 5. *processus mastoideus.* 5. *processus styloideus.* 7. *incisura mastoidea.* 8. *processus zygomaticus ossis frontis.* 9. *os jugale.* 10. *cartilago auriculæ.* 11. *palatum osseum.* 12. *dentes maxillæ superioris.* 13. 14. 15. 16. 17. *maxilla inferior.* 18. *arcus temporalis.*

Trunk, *truncus.*

19. *vertebræ colli.* 20. *V. dorsi.* 21. *V. lumbales.* 22. *os sacrum.* 23. *os coccygis.* 24. *os ilium.* 25. *os pubis.* 26. *os ischii.* 27. *tuberositas ischii.* 28. *costa prima.* 29. The eighth Rib, or first false Rib. 30. The twelfth Rib.

a. membrana arcus posterioris atlantis. b. lig. processuum spinosorum vertebrarum. c. lig. queis pices vertebrarum connectuntur. d. lig. cervicis costæ externum. e. lig. cervicis costæ internum. f. lig. costæ transversale externum. g. lig. intertransversale. h. lig. ilio-lumbale. i. lig. vaga postica oss. ilium s. pelvis. k. lig. sacro-coccygeum posticum longum. l. lig. sacro-tuberosum. m. lig. sacro-spinosum. n. lig. posticum longum ossis ilium. o. lig. obturatorium. p. incisura ischiadica major et q. minor.

Upper Extremities, *extremitates superiores.*

1. *clavicula.* 2. *scapula.* 3. *spina scapulæ.* 4. *acromion.* 5. 6. 7. *humerus.* 8. 9. 10. *radius.* 11. *processus styloideus radii.* 12. 13. 14. 15. *ulna. olecranon.* 16. *superficies dorsalis carpi.* 17. *ossa metacarpi.* 18. 19. 20. 21. 22. *phalanges digitorum.* 23. *superficies volaris carpi.* 24. 25. 26. *ossa sesamoidea.* 27. 28. The Articular Capsules of the fingers are here opened and turned back.

a. lig. scapulæ trapezoidcum. b. lig. acromio-coracoidcum. c. lig. transversum scapulæ. d. membrana capsularis humeri. e. membr. capsularis cubiti. f. lig. laterale externum. g. lig. annulare. h. lig. interosseum. i. k. l. Finger Joint laid open. *m. n. o. lig. lateralia* of the Finger Joint partially cut through and turned back.

Lower Extremities, *extremitates inferiores.*

31. *femur.* 32. *trochanter major.* 33. *trochanter minor.* 34. *caput.* 35. 36. *condyli femoris.* 38. *condylus internus et* 39. *internus tibiæ.* 40. *malleolus internus.* 41. *Fibula.* 42. *capitulum fibulæ.* 43. *malleolus externus.* 44. *patella.* 45. 46. *cartilagines semilunares.* 47. *talus.* 48. *calcaneus.* 49. *superficies dorsalis tarsi.* 50. *ossa metatarsi.* 51–55. *Phalanges digitorum.*

a. a. The *lig. capsulare femoris* of the left side cut through and turned back. *b. lig. capsulare femoris* of the right side unopened. *c. linea aspera femoris. d.* The *lig. later. internum genu* cut away. *e.* A peculiar bundle to this Ligament. *f. lig. laterale externum genu. g. g. lig. cruciatum genu. h.* The tendon of the *m. semimembranosus. i. membrana capsularis capituli fibulæ. k. membrana interossea cruris. l. m. lig. malleoli externi posticum superius et inferius. n. lig. posticum inter fibulam et tarsum. o. lig. laterale externum* of the Ankle Joint. *p. lig. laterale internum* of the Ankle Joint. *q.* The tendon of the *m. extensor cruris. r. lig. patellæ.*

EXPLANATION

OF THE SEVERAL FIGURES WHICH ARE DELINEATED WITH THE SECOND LIGAMENTOUS BODY.

Fig. I. Articulation of the Lower Jaw with the Temporal Bone of the right side.

1. Horizontal section through the Temporal Pit. 2. Vertical Section through the Mastoid process. 3. Mastoid process. 4. A portion of the Malar Bone which remains attached to 5. The Malar process of the Temporal Bone. 6. Upper extremity of the External Lateral Ligament, *lig. laterale externum.* 7. Its lower extremity. 8. Neck of the Lower Jaw. 9. Falciform Notch. 10. Coronoid process. 11. Angle of the Lower Jaw. 12. External Auditory Canal. 13. Styloid process. 14. Stylo-Maxillary Ligament, *lig. stylo-maxillare.* 15. 16. Vertical Section through both Jaws.

Fig. II. External Lateral View of both Jaws. The external Lateral Ligament is removed ; both Capsular Ligaments are cut through, and the Interarticular Cartilage seen in its place. The Condyle of the Jaw is depressed from the Glenoid Cavity in order to render the view of the internal parts more distinct.

1. Horizontal Section through the Temporal Bone. 2. Malar Bone. 3. Vertical section through the Mastoid process. 4. Right Condyle of the Occipital Bone. 5. Styloid process. 6. Stylo-Maxillary Ligament. 7. Base of the Zygomatic Arch. 8. Condyle of the Lower Jaw. 9. Interarticular Cartilage, *cartilago interarticularis.* 10. Inferior Capsular Ligament, *lig. capsulare inferius.* 11. Superior Capsular Ligament, *lig. capsulare superius.* 12. Vertical Section through both Jaws.

Fig. III. Internal View of the Articulation of the Lower Jaw with the Temporal Bone on the right side.

1. Sphenoidal Sinus. 2. Vertical Section through the Cuneiform process of the Occipital Bone. 3. Petrous portion of the Temporal Bone, and the Internal organ of Hearing therein contained. 4. Inner opening of the Anterior Condyloid hole, *for. condyloideum anterius*. 5. Mastoid process. 6. 7. 8. Vertical Section through both Jaws. 9. Upper extremity of the Internal Lateral Ligament, *lig. laterale internum*. 10. Its lower extremity. 11. Commencement of the Maxillary Canal. 12. Styloid process. 13. Stylomaxillary Ligament. 14. Semilunar Notch. 15. 16. Part of the Turbinated plates in the Nostril.

Fig. IV. The Membrane of the posterior Arch of the Atlas.

1. The Occipital Bone. 2. Its Condyloid process. 3. The Mastoid process of the Temporal Bone. 4. The hinder Arch of the Atlas, *arcus posterior atlantis*. 5. Its Transverse process. 6. The second Cervical Vertebra. 7. The third Cervical Vertebra. 8. The fourth Cervical Vertebra. 9. The Spinous process of the second Cervical Vertebra. 10. Ditto of the third. 11. Ditto of the fourth. 12. The Membrane of the hinder Arch of the Atlas, *membrana arcus posterioris atlantis*. 13. The Capsular Membrane connecting the Occipital Bone and the Atlas, *membrana capsularis juncturæ ossis occipitis cum atlante*, cut through and turned back. At this part the Membrane of the hinder Arch of the Atlas is removed.

Fig. V. The Ligamentous Apparatus of the Vertebræ of the Neck.

1. The Spine of the Frontal Bone. 2. The hinder surface of the Body of this Bone. 3. The Mastoid process of the Temporal Bone. 4. A part of the Parietal Bone. 5. The Condyle of the Lower Jaw. 6. The Coronary process. 7. The Angle of the Lower Jaw. 8. The edge of the divided Body of the Occipital Bone. 9. The Styloid process. 10. The Pit for the Lateral Sinus of the Dura Mater. 11. The Condyle of the Occipital Bone. 12. The Upper Angle of the Petrous portion of the Temporal Bone. 13. The Transverse process of the Atlas. 14. Ditto of the second Cervical Vertebra. 15. Ditto of the third. 16. The remainder of the Arch of the fourth Cervical Vertebra. 17. The same part of the fifth. 18. A part of the Dura Mater which has been separated from the Vertebral Canal and turned up. 19. The Head of the Dentiform process of the second Cervical Vertebra which is indistinctly seen. 20. The Ligamentous Apparatus of the Cervical Vertebræ, *apparatus ligamentosus vertebrarum colli*. 21. The part, where this Apparatus terminates, and the Posterior Long Band, *fascia longitudinalis posterior*, of the Vertebræ begins.

Fig. VI. The Transverse Ligament of the Atlas and its Appendages, with the Lateral Ligaments of the Dentiform process of the second Cervical Vertebra.

1. A portion of the Jugular hole proper to the Occipital Bone. 2. The Cuneiform process of the same Bone. 3. The Posterior Clinoid process of the Sphenoid Bone. 4. The Mastoid process of the Temporal Bone cut through. 5. The Parietal Bone. 6. The Furrow for the Lateral Sinus. 7. The Jugular hole. 8. The part, at which the hinder Arch of the Atlas is sawn through. 9. The Transverse process of the

Atlas. 10. The Base of the divided Arch of the second Cervical Vertebra. 11. The Transverse process of this Vertebra. 12. The Head of its Dentiform process. 13. The divided Base of the Arch of the third Vertebra of the Neck. 14. Its transverse process. 15. The divided base of the Arch of the fourth Cervical Vertebra. 16. Its Transverse process. 17. The Dura Mater of the Vertebral Canal turned back. 18. The Ligamentous Apparatus of the Cervical Vertebræ turned back. 19. The Transverse Ligament of the Atlas, *lig. transversale atlantis*. 20. Its lower appendage, *appendix*. 21. Its upper Appendage. 22. The Lateral Ligament of the Dentiform process of the second Cervical Vertebra, *lig. laterale dentis epistrophei*.

Fig. VII. The Transverse Ligament of the Atlas, from which the Appendages have been removed, with the Lateral Ligaments of the Dentiform process of the second Cervical Vertebra.

1. A portion of the Jugular hole proper to the Occipital Bone. 2. The Cuneiform process of that Bone. 3. The Posterior Clinoid process of the Sphenoid Bone. 4. The Mastoid process of the Temporal Bone cut through. 5. The hinder Arch of the Atlas sawn through. 6. The Transverse process of the same Bone. 7. The Base of the Arch of the second Cervical Vertebra sawn through. 8. Its Transverse process. 9. The Dentiform process of this Vertebra. 10. The Ligamentous Apparatus of the Cervical Vertebra turned back. 11. The Transverse Ligament of the Atlas, *lig. transversale atlantis*, its appendages removed. 12. The Lateral Ligament of the Dentiform process of the second Cervical Vertebra, *lig. laterale dentis epistrophei*.

Fig. VIII. The Atlas with its Transverse Ligament, seen from above.

1. Anterior Arch. 2. Articular surface for the Dentiform process. 3. Transverse ligament, *ligam. transversum*. 4. A portion between it and the front Arch of the Atlas in which the Dentiform process is received. 5. Vertebral hole. 6. Articular Surface. 7. Hole for Vertebral vessels. 8. Transverse process. 9. Posterior Arch. 10. Inferior Articular process.

Fig. IX. The Nuchal Ligament.

1. The Occipital Bone. 2. The Great External Protuberance of this Bone. 3. Its upper Transverse Ridge. 4. Its Under Transverse Ridge. 5. The Mastoid hole of the Temporal Bone, *foramen mammillare*. 6. The Mastoid process of that Bone. 7—13. The seven Cervical Vertebræ. 14. The Capsular Membrane connecting the Occipital Bone and the Atlas. 15. The Capsular Membrane of the Oblique processes, *membr. capsularis processuum obliquorum*. 16. The Ligament of the Spinous processus, *lig. processuum spinosorum*. 17. The Nuchal Ligament.

Fig. X. A portion of the Spine with the Ribs.

1—8. The third, fourth, fifth, sixth, seventh, eighth, ninth, and tenth Ribs. 9. The Tubercle, *tuberculum*, of the Ribs. 10—17. The Spinous process of the third, fourth, fifth, sixth, seventh, eighth, ninth, and

tenth Dorsal Vertebræ. 18—25. The Transverse processes of the same Vertebræ. 26. The Inferior Oblique process of the tenth Vertebra. 27. The External Transverse Ligaments of the Ribs, *lig. costæ transversale externum.* 28. The Internal Ligament of the Neck of the Ribs, *lig. cervicis costæ internum.* 29. The points at which the External Ligament of the Neck of the Rib, *lig. cervicis costæ externum*, commences from the Inferior Oblique process of the Vertebra whence it passes to the Neck of the Rib. 30. The Ligament between the Transverse processes of the Vertebræ, *lig. intertransversale*, which passes from the Transverse process of the upper to the same process of the subjacent Vertebra. 31. The Ligament of the Spinous processes of the Vertebra. (Fig. IX. 16.)

Fig. XI. The Posterior Long Ligament of the Lumbar Vertebræ, and of the false Vertebræ of the Sacrum.

1. The Inferior Oblique process of the twelfth Dorsal Vertebra. 2—6. The same process of the first, second, third, fourth, and fifth Lumbar Vertebræ. 7—11. The Transverse process of the first, second, third, fourth, and fifth Lumbar Vertebræ. 12. The Lateral Articular surface of the Sacrum. 13. The four Holes of this Bone. 14. Its Coccygeal process. 15. The arched termination of the vertebral Canal. 16—19. The four false Vertebræ of the Coccyx. 20. The rest of the short Ligaments of the Coccix, *lig. sacro-coccygei brevis*, and the Accessory Ligamentous Membranes, *membr. ligamentosæ-accessoriæ.* 21. The Posterior Long Ligament of the Vertebræ, *fascia longitudinalis vertebrarum posterior.* 22. Its expansion over the Intervertebral substance of the Vertebræ. 23. The point at which this Ligament terminates in the first false Vertebra of the coccyx.

Fig. XII. The Yellowish Ligaments of the Arches of the Vertebræ.

1. The Arch of the first Lumbar Vertebra. 2. Its Transverse process. 3. The Base of its Arch sawn off from the Body. 4. The Upper Oblique process. 5. The Arch of the second Lumbar Vertebra. 6. The Base sawn off from the Body. 7. Its Transverse process. 8. The Arch of the third Lumbar Vertebra. 9. Its Base sawn off. 10. Its Transverse process. 11. Its Inferior Oblique process. 12. Its Spinous process. 13. The Yellowish Ligaments of the Arches of the Vertebræ, *lig. crurum vertebrarum subflava.* 14. The Fissure, *rima intermedia*, between these Ligaments.

Fig. XIII. The upper Intervertebral substance of the third Lumbar Vertebra.

1. The root of the Arch. 2. Its Transverse process. 3. Its Superior Oblique process. 4. Its Accessory process. 5. The Inferior Oblique process. 6. The Spinous process. 7. The Vertebral hole. 8. The Intervertebral substance, *cartilago intervertebralis.* 9. The Gelatinous Nucleus, *nucleus gelatinosus.*

Fig. XIV. The Round Ligament of the Head of the Thigh Bone, with the glandular fatty Mass.

1. The external surface of the Ilium. 2. Its Crest. 3. Its Upper Anterior Spinous process. 4. Its Lower Anterior Spinous process. 5.

The part at which the Horizontal Branch of the Pubic Bone has been sawn off. 6. A part of the Descending Branch of the Ischium. 7. Its Tuberosity. 8. Its Great Notch. 9. The Head of the Os Femoris. 10. Its Neck. 11. Its Great Trochanter. 12. Its Little Trochanter. 13. The Capsular Membrane of the Thigh Bone cut open and turned back. 14. The little bridles, *retinacula*, of this Membrane. 15. Fat, on the external surface of this Membrane. 16. The Cartilaginous Lip, *labrum cartilagineum*, of the Cotyloid Cavity. 17. 18. The *cornua* of the Cotyloid Cavity lined with Cartilage. 19. The Round Ligament, *lig. teres*, of the head of the Thigh Bone. 20. The glandular fatty Mass, *massa adiposa-glandulosa*, which is covered with a thin expansion of the Round Ligament.

The Thigh Bone is drawn inwards in order to render the bundles of the Capsular Membrane more distinct; hence also is the Round Ligament turned down.

Fig. XV. The Cotyloid Cavity with the glandular fatty Mass.

1—6. Are named as in the preceding figure. 7. A probe introduced into the Gap of the Cotyloid Cavity, *hiatus acetabuli*. 8. A portion of the Cartilaginous edge which covers this Gap externally. 9. The glandular fatty Mass, *massa adiposa-glandulosa*.

Fig. XVI. The Hip Joint, sawn through vertically, to show distinctly the interior of the Capsular Ligament, and the Round Ligament.

1. Horizontal Section of the Ilium. 2. Its inner surface. 3. Its outer surface. 4. Vertical Section through the Ilium and the Cotyloid Cavity. 5. Articular Cartilage of the Cotyloid Cavity. 6. Its Cartilaginous edge. 7. Attachments of the Capsular Ligament to the edge of the Cotyloid Cavity. 8. Attachments of the same Ligament to the Neck of the Os Femoris. 9. Vertical Section through the Head, Neck, and Great Trochanter of the Os Femoris. 11. Attachment of the Round Ligament to the Pit in the Head of the Thigh Bone. 12—14. Attachment of the same to the bottom of the Cotyloid Cavity. 15. Internal surface of the Capsular Ligament. 16. Vertical section through the Pubis, and Ischium. 17. Tuberosity. 18. Great Trochanter. 19. Little Trochanter. 20. Part of the Oval hole. 21. A portion of the Os Femoris cut asunder.

Fig. XVII. The Knee Joint sawn through vertically, so as to expose clearly the position of the Capsular Ligament.

1. Os Femoris. 2. Its Anterior surface. 3. Tendon of the *M. rectus femoris*. 4. Sacciform expansion of the Capsular Ligament, *relaxatio sacciformis ligamenti capsularis*. 5. Outer half of the Patella. 6. 7. Ligament of the Patella, *lig. patellæ*. 8. Its mucous Bag. 9. 10. Mucous Ligament of the Knee Joint. 11. Internal surface of the Capsular Ligament. 12. External Condyle of the Thigh Bone. 13. Anterior Crucial ligament, *ligam. cruciatum anticum*. 14. Upper surface of the Outer Semilunar Cartilage, *cartilago semilunata externa*. 15. 16. Triangular cut surface of this Cartilage. 17. Posterior part of the Capsular Ligament. 18. Articular Cartilage of the hinder surface of the Patella. 19. Vertical Section through the Tibia. 20.

Vertical Section through the Os Femoris. 21. Upper extremity of the Fibula.

Fig. XVIII. Vertical Section through the articulation at the Ankle of the Tibia, Fibula, and tarsus of the left side.

1. Half the lower extremity of the Tibia. 2. Half the lower extremity of the Fibula. 3. The Interosseous Ligament, *lig. interosseum.* 4. The Inner Ankle. 5. The outer Ankle. 6. A part of the External Lateral Ligament, *lig. fabulare calcanei.* 7. Interosseous Ligament, *lig. inter fibulam et tibiam.* 8. Capsular Ligament of the Ankle Joint laid open. 9. A part of the Deltoid Ligament, *lig. deltoideum.* 10. The Astragalus cut through vertically. 11. 12. The Os Calcis cut through. 13. The Ligament between the Astragalus and Os Calcis, *lig. plantare inter calcaneum et astragalum.*

Fig. XIX. The Instep or back of the Foot with its Ligaments.

1. The Tibia. 2. The Fibula. 3. The Interosseous Ligament. 4. The Astragalus. 5. The Os Calcis. 6. The Os Naviculare. 7. The Os Cuboides. 8. Os Cuneiforme Internum. 9. Ib. Medium. 10. Ib. Externum. 11-15. The five Metacarpal Bones. 16. The Upper Anterior Ligament of the Outer Ankle, *lig. malleoli externi anticum superius.* 17. The under Anterior Ligament of the same Ankle. 18. The Deltoid Ligament, *lig. deltoideum.* 19. The Middle Perpendicular Ligament of the Fibula, *lig. fibulæ medium perpendiculare.* 20. The Anterior Ligament between the Fibula and Astragalus, *lig. anterius inter fibulam et talum.* 21. The ligamentous Apparatus of the Sinuosity, *apparatus ligamentosus cavitatis sinuosæ.* 22. The Upper Ligament between the Os Naviculare and the Astragalus, *lig. superius inter talum et os naviculare.* 23. The Dorsal Ligament between the Os Naviculare and the Os Calcis, *lig. dorsale inter calcaneum et os naviculare.* 24. The Dorsal Ligament between the Os Calcis and the Os Cuboides, *lig. dorsale inter calcaneum et os cuboideum,* which generally consists of three portions. 25. The Dorsal Ligament between the Os Naviculare and Os Cuboides, *lig. dorsale inter os naviculare et cuboideum.* 26. The Dorsal Ligament between the Os Naviculare and Os Cuneiforme Externum, *lig. dorsale inter os naviculare et cuneiforme tertium.* 27. The Dorsal Ligament between the Os Naviculare and Os Cuneiforme Medium, *lig. dorsale inter os naviculare et cuneiforme secundum.* 28. The Dorsal Ligament between the Os Naviculare and the Os Cuneiforme Internum, *lig. dorsale inter os naviculare et cuneiforme primum.* 29. The Dorsal Ligament between the Os Cuboides and Os Cuneiforme Externum, *lig. dorsale inter os cuboideum et cuneiforme tertium.* 30. The Dorsal Ligament between the Os Cuneiforme Medium and Externum, *lig. dorsale inter os cuneiforme secundum et tertium.* 31. The Dorsal Ligament between the Os Cuneiforme Medium et Internum, *lig. dorsale inter os cuneiforme secundum et primum.* 32. The Capsular Membrane of the Inner Cuneiforme and first Metatarsal Bone, *membrana capsularis ossis cuneiformis et metatarsi primi.* 33. The Dorsal Ligament between the Inner Cuneiform and the second Metatarsal Bone, *lig. dorsale inter os metatarsi secundum et os cuneiforme primum.* 34. The Dorsal Ligament between the middle Cuneiform and second Metatarsal Bone, *lig. dorsale inter os metatarsi secundum et cuneiforme secundum.* 35. The Dorsal Ligament between the

Outer Cuneiform and second Metatarsal Bones, *lig. dorsale inter os metatarsi secundum et cuneiforme tertium.* 36. The Ligament between the outer Cuneiform and third Metatarsal Bones, *lig. inter os metatarsi tertium et cuneiforme tertium.* 37. The Ligament between the Cuboid and the third Metatarsal Bones, *lig. inter os metatarsi tertium et cuboideum.*

In the triangular space between 35. 36. 40. is the Ligament between the Middle Cuneiform and the third Metacarpal Bone, *lig. inter os metatarsi tertium et cuneiforme secundum.* 38. The Ligament between the Cuboid and fourth Metatarsal Bone, *lig. inter os metatarsi quartum et cuboideum.* 39. The connexion of the Cuboid and fifth Metatarsal Bone, *connexio ossis metat. quinti et cuboidei.* 40. The Dorsal Ligament of the Base of the second and third Metatarsal Bones, *lig. dorsale baseos ossis metat. secundi et tertii.* 41. The Dorsal Ligament of the Base of the third and fourth Metatarsal Bones, *lig. dorsale baseos ossis metat. quarti.* 42. The Dorsal Ligament of the Base of the fourth and fifth Metatarsal Bones, *lig. dorsale baseos ossis metat. quarti et quinti.* 43. The Lateral Ligament of the Base of the second and third Metatarsal Bones, *lig. laterale baseos ossis metat. tertii et secundi.* 44. The Lateral Ligament of the base of the third and fourth Metatarsal Bones, *lig. laterale baseos ossis metat. tertii et quarti.* 45. The Lateral Ligament of the Base of the fourth and fifth Metatarsal Bones, *lig. laterale baseos ossis metat. quarti et quinti.* 46. The Long Plantar Ligament between the os Calcis and os Cuboides, *lig. plantare longum inter calcaneum et os cuboideum.* 47. The tendon of the *M. peroneus brevis.*

Fig. XX. The Foot with its Ligaments, on the inside.

1. The Tibia. 2. The Groove of the Inner Ankle. 3. The Os Calcis. 4. Its Internal process. 5. The Astragalus. 6. The Tuberosity of the Os Naviculare. 7. The Os Cuneiforme Internum. 8. The os Cuneiforme Medium. 9. The first Metatarsal Bone. 10. The second Metatarsal Bone. 11. The Deltoid Ligament. 12. The Capsular Membrane of the Astragalus and Os Calcis, *membr. capsularis tali et calcanei*, which is covered by the Deltoid Ligament. 13. The Cartilaginous Pulley, *trochlea cartilaginea*, of the Os Calcis and Os Naviculare. 14. The Capsular membrane of the Astragalus and Os Naviculare, *membr. capsularis tali et ossis navicularis.* 15. The Dorsal Ligament between the Navicular and Middle Cuneiform Bone, *lig. dorsale inter os naviculare et cuneiforme secundum.* 16. The Dorsal Ligament between the Navicular and Internal Cuneiform Bone, *lig. dorsale inter os naviculare et cuneiforme primum.* 17. The Lateral Ligament between the Navicular and internal Cuneiform Bone, *lig. laterale inter os naviculare et cuneiforme primum.* 18. The Dorsal Ligament between the outer and middle Cuneiform Bones, *lig. dorsale inter os cuneiforme primum et secundum.* 19. The Dorsal Ligament between the Inner Cuneiform and the second Metatarsal Bone, *lig. dorsale inter os metat. secundum et cuneiforme primum.* 20. The Dorsal Ligament between the Middle Cuneiform and the second Metatarsal Bone, *lig. dorsale inter os metat. secundum et cuneiforme secundum.* 21. The Capsular Membrane of the Inner Cuneiform and first Metatarsal Bone, *membr. caps. ossis cuneiformis et metatarsi primi.* 22. The tendon of the *M. tibialis anticus.* 23. The tendon of the *M. tibialis posticus.*

Fig. XXI. The Posterior Ligaments of the Inner and Outer Ankle.

1. The Tibia. 2. The Inner Ankle. 3. The Groove of the Ankle by which the tendon of the *M. tibialis posticus* passes. 4. The Fibula. 5. The Outer Ankle. 6. The body of the Astragalus which is shown by removing the Capsular Membrane of the Ankle Joint. 7. The Os Calcis. 8. The tendon of the *M. tibialis posticus* turned down as it runs into its Sheath. 9. The Interosseous Membrane. 10. The Posterior Ligament of the Outer Ankle, *lig. malleoli externi posticum superius.* 11. The Inferior Posterior Ligaments of the Outer Ankle, *lig. malleoli externi postieum inferius.* 12. Strong fibres of the Capsular Membrane of the Ankle Joint, *membr. caps. artieuli tarsi.* 13. The Posterior Ligament between the Fibula and Astragalus, *lig. inter fibulam et talum posterius.* 14. The middle Perpendicular Ligament of the Fibula, *lig. fibulæ medium perpendieulare.* 15. A portion of the Capsular Membrane of the Astragalus and Os Calcis, *membr. eapsularis tali et ealeanei.* 16. The Deltoid Ligament, *lig. deltoideum.* 17. The Cartilaginous Pulley, *trochlea eartilaginea*, of the Os Naviculare and Os Calcis.

Fig. XXII. The Sole of the Foot with its Ligaments.

1. The Os Calcis. *a.* Its Internal process. 2. The Os Cuboides. 3. Its Groove. 4. The Os Naviculare. 5. The Os Cuneiforme Externum. 6. The Os Cuneiforme Internum. 7. The Astragalus. 8. The Tibia. 9. The Inner Ankle. 10—14. The five metatarsal Bones. 15. The tendon of the *M. tibialis posticus.* 16. A portion of its ligamentous Sheath, *vagina ligamentosa.* 17. The Sheath, *vagina*, of the tendon of the *M. flexor longus pollicis pedis.* 18. The Deltoid Ligament. 19. The Cartilaginous Pulley, *trochlea cartilaginea*, of the Os Naviculare and Os Calcis. 20. The Long Plantar Ligament between the Os Calcis and Os Cuboides, *lig. plantare longum inter ealeaneum et os euboideum.* 21. The Oblique Plantar Ligament, *lig. plantare obliquum*, of those Bones. 22. The Round Plantar Ligament of the Os Naviculare and Os Calcis, *lig. plantare teres ealeanei et ossis naviculari.* 23. The Flat Plantar Ligament, *lig. plantare planum*, of these Bones. 24. The Transverse Plantar Ligament between the Os Naviculare and Os Cuboides, *lig. plantare transversum inter os naviculare et euboideum.* 25. The Plantar Ligament between the Navicular and Internal Cuneiform Bone, *lig. plantare inter os naviculare et cuneiforme primum.* 26. The Plantar Ligament between the Navicular and the middle Cuneiform Bone, *lig. plantare inter os naviculare et cuneiforme secundum.* 27. The Capsular Membrane of the Internal Cuneiform and first Metatarsal Bone, *membr. caps. ossis cuneiformis et metatarsi primi.* 28. The Plantar Ligament between the Inner Cuneiform and second Metatarsal Bone, *lig. plantare inter os cuneiforme primum et metatarsi secundum.* 29. The Plantar Ligament between the Internal Cuneiform and the third Metatarsal Bone, *lig. plantare inter os cuneiforme primum et metatarsi tertium.* 30. The Lateral Ligament between the outer Cuneiform and the fourth Metatarsal Bone, *lig. laterale inter os cuneiforme tertium et metat. quartum.* 31. The Transverse Ligament of the fifth Metatarsal Bone, *lig. transversale ossis metat. quinti.* 32. The Common Plantar Ligament of the Metatarsal Bones, *lig. plantare ossibus metat. commune.* 33. The Plantar Ligaments between the Cuboid and outer Cuneiform Bone, *lig. plantaria inter os euboideum et cuneiforme tertium.* 34. The Plantar Ligament of the base of

the second and third Metatarsal Bones, *lig. plantare baseos ossis metat. secundi et tertii.* 35. The Plantar Ligament of the Base of the third and fourth Metatarsal Bones. 36. The Plantar Ligament of the Base of the fourth and fifth Metatarsal Bones. 37. The connexion of the fifth Metatarsal Bone with the Cuboid Bone, *connexio ossis metatarsi quinti et cuboidei.* 38. The tendon of the *M. peroneus brevis.*

Fig. XXIII. The Sole of the Foot with its Deep Ligaments.

1. The Tibia. *α.* The inner Ankle. 2. The Fibula. *β.* The outer Ankle. 3. The Body of the Os calcis. 4. Its Anterior process. 5. Its internal process. 6. Its Groove. 7. The Posterior Cavity of the Os Cuboides. 8. The Oblique process of that Bone. 9. Its Grooves. 10. The Tuberosity of the Os Naviculare. 11. The Os Cuneiforme Internum. 12. Ib. Medium. 13. Ib. Externum. 14—18. The five Metatarsal Bones. 19. The Tuberosity of the fifth Metatarsal Bone. 20. The Membrane between the Bones of the Leg. 21. The Groove of the Inner Ankle through which passes the tendon of the *M. tibialis postieus.* 22. The Deltoid Ligament. 23. The ligamentous Sheath of the tendon of the *M. flexor longus pollicis pedis.* 24. The Cartilaginous Pulley of the Os Naviculare and Os Calcis. 25. The Flat Plantar Ligament of the Os Naviculare and Os Calcis, *lig. plantare planum calcanei et ossis navicularis.* 26. The Round Plantar Ligament, *lig. plantare teres*, of these Bones. 27. The Oblique Plantar Ligament between the Os Calcis and Os Cuboides, *lig. plantare obliquum inter calcaneum et os cuboideum.* 28. The Ligamentous Mass between the Navicular and Cuboid Bones, *massa ligamentosa inter os naviculare et cuboideum.* 29. The Lateral Ligament between the Navicular and Internal Cuneiform Bone, *lig. laterale inter os naviculare et cuneiforme primum.* 30. The Plantar Ligament, *lig. plantare*, of these Bones. 31. The Plantar Ligament between the Navicular and Middle Cuneiform Bones, *lig. plantare inter os naviculare et cuneiforme secundum.* 32. The Plantar Ligament between the Cuboid and External Cuneiform Bones, *lig. plant. inter os cuboid. et cuneif. tertium.* 33. Two similar Ligaments between these Bones. 34. The Straight Plantar Ligament, *lig. plant. rectum*, between these Bones. 35. The Capsular Membrane of the Internal Cuneiform and the first Metatarsal Bone. 36. The Plantar Ligament between the Internal Cuneiform and the second and third Metatarsal Bones. 37. The Lateral Ligament between the External Cuneiform and the fourth Metatarsal Bone. 38. The junction, *connexio*, of the fifth Metatarsal Bone with the Cuboid Bone. 39. The Plantar Ligament of the Base of the second and third Metatarsal Bones. 40. The Plantar Ligament of the Base of the third and fourth Metatarsal Bones. 41. The Plantar Ligament of the Base of the fourth and fifth Metatarsal Bones.

Fig. XXIV. A portion of the Sole of the Foot with its Deep Ligaments.

1. The Os Calcis. 2. The Os Cuboides. 3. Its Groove. 4. The Oblique process of the same Bone. 5. The Os Cuneiforme Internum. 6. Ib. Medium. 7. Ib. Externum. 8. Its Tip. 9. The second Metatarsal Bone which has here been somewhat turned aside. 10. The third Metatarsal Bone. 11. A part of the Dorsal Ligament between the Os Calcis and Os Cuboides. 12. The Rhomboid Ligament between the

Os Calcis and the Os Cuboides, *lig. plantare rhomboideum inter calcaneum et os cuboideum.* 13. The Curved External Lateral Ligament, *lig. laterale interosseum externum incurvum*, of the third Metatarsal Bone. 14. The Straight External Lateral Ligament, *lig. laterale interosseum externum rectum*, of the same Bone. 15. The Straight Internal Lateral Ligament, *lig. laterale interosseum internum rectum*, of the third Metatarsal Bone. 16. The Curved Internal Lateral Ligament, *lig. laterale interosseum internum incurvum*, of that Bone. 17. The Lateral Ligament, *lig. interosseum laterale*, of the second Metatarsal Bone. 18. The Plantar Ligament between the Internal Cuneiform and the second Metatarsal Bone. 19. The Deep Ligament, *lig. interosseum*, of the Internal and Middle Cuneiform Bone. 20. The Deep Ligament, *lig. interosseum*, of the Middle and External Cuneiform Bones.

Fig. XXV. A portion of the Sole of the Foot with the Deep Ligaments.

1. The Navicular Bone. 2. The Posterior Cavity of the Cuboid Bone. 3. Its Oblique process. 4. Its Groove. 5. The Internal Cuneiform Bone. 6. The Middle ditto. 7. The external ditto. 8. The first Metatarsal Bone. 9. The second ditto. 10. The third ditto. 11. The Curved External Lateral Ligament, *lig. laterale interosseum externum incurvum*, of the third Metatarsal Bone. 12. The Straight External Lateral Ligament, *lig. laterale interosseum externum rectum*, of this Bone. 13. The Plantar Ligament between the Internal Cuneiform and the third Metatarsal Bone. 14. The Plantar Ligament between the Internal Cuneiform and the second Metatarsal Bone. 15. The Accessory Plantar Ligament, *lig. plantare accessorium*, of the Capsular Membrane of the Internal Cuneiform and first Metatarsal Bone. 16. The Lateral Ligament between the Navicular and Internal Cuneiform Bone. 17. The Plantar Ligament between the Navicular and Middle Cuneiform Bone. 18. The Deep Ligament, *lig. interosseum*, of the Internal and Middle Cuneiform Bones.

Fig. XXVI. The Ligaments of the Sesamoid Bones of the Great Toe.

1. The first Joint of the Great Toe. 2. Its second Joint. 3. The Inner Sesamoid Bone. 4. The Outer Sesamoid Bone. 5. The Transverse Ligament of these Bones, *lig. transversale ossium sesamoideorum.* 6. Their Ligamentous filaments, *filamenta ligamentosa.* 7. The common Membrane of the Flexor tendons cut open and turned back. 8. The tendon of the *M. flexor longus pollicis* turned back. 9. The fibrous connexions, *vinculum accessorium*, of this tendon.*

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* The Ligamentous Bodies are copied from the celebrated works of *Antomarchi:* Planches Anatomiques du corps humain exécutées d'après les dimensions naturelles, Paris, 1826.—The Figures I., II., III., XVI., XVII. XVIII., are from *Cloquet's* work, and the other Figures with the Second Ligamentous Body are from *Loder.*

FIRST, SECOND, THIRD, AND FOURTH

BODIES OF MUSCLES.

E. F. G. H.

MUSCLES OF THE HEAD, *museuli capitis.*

Muscles of the Skull, *M. cranii.*

A. M. frontalis. B. M. occipitalis. 1. 2. 2. *galea aponeurotica cranii.*

Muscles of the Face, *M. faciei.*

I. M. orbicularis palpebrarum. 1. *ligamentum palpebrale internum.* 2. *stratum internum.* 3. *externum. α. M. ciliaris. β. M. levator palpebræ superioris. II. M. corrugator superciliorum. III. M. compressor nasi. IV. M. levator labii superioris alæque nasi. V. M. levator labii superioris proprius. VI. M. zygomaticus minor.** A peculiar slip. *VII. M. zygomaticus major. VIII. M. levator anguli oris. IX. M. depressor anguli oris. X. M. depressor labii inferioris. XI. M. buccinator. XII. M. depressor septi mobilis. XIII. M. orbicularis oris. XIV. M. depressor alæ nasi. XV. M. levator menti. XVI. M. masseter.* 1. outer, 2. inner Portion. *XVII. M. temporalis. XVIII. M. pterygoideus internus. XIX. M. pterygoideus externus.* 4—20. *M. levator veli palatini.* 21. *M. tensor veli palatini seu circumflexus palati.*

Muscles of the Ear, *M. auriculæ.*

A. M. attollens auriculæ. B. M. attrahens auriculæ. C. M. retrahentes auriculæ. D. M. helix major. E. M. helix minor. F. M. tragicus. G. M. antitragicus. H. M. transversus aurieulæ.

MUSCLES OF THE TRUNK, *M. trunci.*

Muscles of the Neck, *M. colli.*

A. M. subcutaneus colli. B. M. sterno-cleido-Mastoideus. C. M. omohyoideus. D. M. sternohyoideus. E. M. sternothyreoideus. a. Air tube, *aspera arteria. b. cartilago cricoidea. c. cartilago thyreoidea. d. os hyoideum. F. M. hyothyreoideus. G. M. digastricus maxillæ inferioris. H. M. mylohyoideus. I. M. genihyoideus. K. M. genioglossus. L. M. hyoglossus. M. M. stylohyoideus. N. M. styloglossus. O. M. stylopharyngeus.*

N. B. The greater number of these muscles are engraved separately on Table XVIII. and Table XXII., as well as those of the velum palati and pharynx.

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* After *Albinus: Tabulae sceleti et musculorum corporis humani. Lugd. Batav.*, 1747, and from Nature.

Muscles of the Chest, *M. thoracis.*

A. M. pectoralis major. B. M. pectoralis minor. 1. Portion, which runs into the *Aponcurosis* of the *M. obliquus externus. C. M. subclavius. D. M. serratus major.* 1. 2. 3. 4. 5. 6. 7. 8. Its slips, *dentationes. E. M. intercostales externi. F. M. intercostales interni. a. pleura. G. M. triangularis sterni.* This is also engraved on Tab. III., Fig. 5, and Tab. XVII., Fig. 8.

Muscles of the Belly, *M. abdominales.*

A. M. obliquus externus. a. b. c. d. e. f. g. h. i. k. l. The *aponeurosis* of this muscle, which first passing towards the mesial line of the body, connects itself with that of the other side, and so forms the central white line, *linea alba abdominis*, (*b. b.*) in which the navel a is found; it then secondly passes down towards the *symphysis ossium pubis* and divides into two *crura*, a *crus superius seu internum* (*h.*), and a *crus inferius seu externum* (*l. l.*), by which the external abdominal ring, *annulus abdominalis externus* (*i*), is formed. *d. d.* Points at which the *M. obliquus internus* shines through the *aponeurosis* of the *obliquus externus. e. e.* Points at which the *aponeurosis* of the *M. obliquus internus* commences, connects itself with the *M. obliquus externus*, and then commonly proceeds with the *M. rectus abdominis* to the Linea alba *f. f.* shining through, and connected with, the *aponcurosis* of the *M. obliquus externus et internus.* *The *inscriptiones tendineæ* of the *M. rectus abdominis. h.* Points out the course of the inguinal canal, *canalis inguinalis*, through which the spermatic cord, *funiculus spermaticus*, and the M. cremaster pass. *g. g. g. g.* Are the four upper dentations of this muscle, which are connected with that of the *M. serratus magnus D.* 5. 6. 7. 8. and that of the *M. latissimus dorsi B.* 1. 2. *B. M. obliquus internus. m. m.* A part of the front layer of the *aponeurosis* of this muscle, which passes with that of the *M. obliquus externus* before *M. rectus abdominis D. n.* A part of the hinder layer of the *aponeurosis* of the *obliquus internus*, which passes behind the *M. rectus* connected with the front *aponeurosis* of the *M. transversus abdominis*, to the *linea alba.* **M. cremaster*, which comes from the *M. obliquus internus* and *M. transversus*, and spreads on the common coat of the spermatic cord and testicle, *tunica vaginalis funiculi spermatici et testis* (**). *C. M. transversus.* C^1. Anterior *aponeurosis* of this muscle. *. *. Points where this *aponeurosis* is connected with the *M. obliquus internus*, and where the anterior plate of the *aponeurosis* of the *M. obliquus internus* is cut away. **. The common *aponeurosis* of the hinder *lamella* of the *M. obliquus internus* and of the *M. transversus*, which passes behind the *M. rectus*, so that this muscle also lies in a peculiar tendinous sheath. This posterior common *aponeurosis* of the *M. rectus* does not, however, descend so far down as the anterior, therefore the *peritonæum* (***) is visible.—*a. β. γ. δ.* Spermatic cord, *funiculus spermaticus. a. β. Venæ spermaticæ. γ. Arteria spermatica interna. δ. vas deferens.—D. M. rectus abdominis. E. M. pyramidalis. F. diaphragma. I. pars costalis.* 1. Portion, which arises from the Ensiform Cartilage. 2. portion which is attached to the *peritonæum.* 3. 4. 5. 6. 7. 8. Portions which arise from, 7. 8. 9. 10. 11. and 12. Ribs and their cartilages. *II. pars lumbaris.* 9. *crura interna.* 10. *crura media.* 11. *crura externa.* 12. *crus quartum sinistrum.* 13. Portion which arises from the surface of the *M. quadratus lumborum*, but is not always present.

14. Another portion on the right side, which is not always found on both sides, and arises from the transverse processes of the first and second *lumbar vertebræ*. 15. *hiatus œsophageus*. 16. *hiatus aorticus*. *III. pars tendinea*. 17. *foramen quadrilaterum*.—Compare also Tab. XII.—

Muscles of the Loins, *M. lumborum*.

G. M. psoas major. *H. M. psoas minor*. *I. M. iliacus internus*. *K. M. quadratus lumborum*.

Muscles of the Neck and Back, *M. cervicis et dorsi*.

A. M. cucullaris. *B. M. latissimus dorsi*. *C. M. rhomboideus minor*. *D. M. rhomboideus major*. *E. M. serratus posticus superior*. *F. M. serratus posticus inferior*. *G. M. splenius capitis*. *H. M. splenius colli*. *I. M. levator scapulæ*. *K. M. biventer cervicis*. *L. M. complexus*. *M. M. trachelomastoideus*. *N. M. transversalis cervicis*. *O. M. cervicalis descendens*. *P. M. scalenus anterior*. *Q. M. scalenus medius*. *R. M. scalenus posterior*. *S. M. longissimus dorsi, and T. M. sacrolumbalis*. *U. M. spinalis dorsi*. *V. M. semispinalis dorsi*. *W. M. semispinalis cervicis*. *X. M. multifidus spinæ*. *Y. M. levatores costarum breves*. *Z. M. levatores costarum longi*. *I. M. interspinales cervicis, dorsi, lumborum*. *II. M. rectus capitis posterior major*. *III. M. rectus capitis posterior minor*. *IV. M. obliquus capitis inferior s. major*. *V. M. obliquus capitis superior s. minor*. *VI. M. intertransversarii cervicis anteriores a. et posteriores b*. *VII. M. intertransversarii dorsi et lumborum*. *VIII. M. longus colli*. *IX. M. rectus capitis anterior major*. *X. M. rectus capitis anterior minor*. *XI. M. rectus capitis lateralis*.

Muscles of the *perinæum*.

A. M. transversus perinæi superficialis. *B. M. transversus perinæi profundus*. *C. M. sphincter ani externus*. *D. M. sphincter ani internus*. *E. M. levator ani* and *coccygeus*. *F. M. coccygeus*.

Muscles of the Male and Female Organs of Generation, *M. genitalium sexus potioris et sequioris*.

G. M. ischio-cavernosus penis. *H. M. accelerator urinæ s. bulbocavernosus*. *I. M. ischio-cavernosus clitoridis*. *K. M. constrictor ostii vaginæ*.

Muscles of the Upper Extremities, *M. extremitatum superiorum*.

Muscles of the Shoulder Blade, *M. scapulæ*.

I. M. deltoides. *II. M. supraspinatus*. *III. M. infraspinatus*. *IV. teres minor*. *V. M. teres major*. *VI. M. subscapularis*.

Muscles of the Upper Arm, *M. humeri*.

A. M. biceps brachii. *B. M. coracobrachialis*. *C. M. brachialis internus*. *D. M. triceps brachii*. 1. *anconæus longus*. 2. *anconæus externus*. 3. 5. 6. *anconæus internus seu brachialis externus*. 5. Their common tendon.

Muscles of the Fore Arm, *M. cubiti.*

I. M. pronator rotundus. II. M. palmaris longus. III. M. flexor carpi radialis. IV. M. flexor carpi ulnaris. V. M. flexor digitorum sublimis. 1. 2. 3. 4. Its four tendons. 5. 6. 7. 8. Points where these four tendons divide, and the tendons *a. b. c. d.* of the deep flexor pass through. *VI. M. flexor digitorum profundus. VII. M. flexor pollicis longus. VIII. M. pronator quadratus. IX. M. supinator longus. X. M. extensor carpi radialis longus.* 7. *ligamentum intermusculare externum. XI. M. extensor carpi radialis brevis. XII. M. supinator brevis. XII. a. ejus pars posterior. XIII. M. anconæus quartus s. parvus. XIV. M. extensor digitorum communis. XV. M. extensor carpi ulnaris. XVI. a. b. c. d. M. abductor pollicis longus. XVII. M. extensor pollicis brevis. XVIII. M. extensor pollicis longus. XIX. M. extensor digiti indicis. XX. M. extensor digiti minimi proprius. A. B. lig. carpi dorsale. commune.*

Muscles of the Hand, *M. manus.*

A. M. palmaris brevis. B. M. lumbricales. C. M. interossei interni. D. M. interossei externi. E. M. abductor pollicis brevis. F. M. flexor pollicis brevis. G. M. opponens pollicis. H. M. abductor pollicis. I. M. abductor digiti indicis. K. M. abductor digiti minimi. L. M. flexor digiti minimi. M. M. abductor digiti minimi. A. ligamentum carpi volare proprium. B. aponeurosis palmaris. 9. 10. 11. 12. *ligamenta annularia, vaginalia, cruciata et obliqua,* which enclose the tendons of the superficial and deep flexors.

Muscles of the Lower Extremities, *M. extremitatum inferiorum.*

Muscles of the Buttocks, *M. natium.*

I. M. glutæus maximus. II. M. glutæus medius. III. M. glutæus minimus. IV. pyriformis. V. M. geminus superior. VI. M. geminus inferior. VII. M. obturatorius internus. VIII. M. quadratus femoris.

Muscles of the Thigh, *M. femoris.*

IX. M. biceps femoris. X. M. semitendinosus. XI. M. semimembranosus. XII. M. tensor fasciæ latæ. XIII. M. sartorius. XIV. M. rectus femoris. XV. M. vastus internus. XVI. M. vastus medius. XVII. M. vastus internus. XVIII. M. subcruralis. XIX. M. gracilis. XX. M. pectineus. XXI. M. adductor longus femoris. XXII. M. adductor brevis femoris. XXIII. M. adductor magnus femoris. * Aperture by which the femoral vessels pass into the ham, *fossa poplitea. A. XXIV. M. obturatorius externus.*

Muscles of the Leg, *M. cruris.*

A. M. tibialis anticus. B. M. extensor digitorum pedis. C. M. extensor hallucis longus. * A peculiar portion of tendon. *D. M. peroneus tertius. E. M. peroneus longus. F. M. peroneus brevis. G. M. gastrocnemius. H. M. soleus. I. M. plantaris. K. M. popliteus.*

L. M. flexor longus digitorum pedis. M. M. flexor hallucis longus. N. M. tibialis posticus.

Muscles of the Foot, *M. pedis.*

O. M extensor digitorum brevis. P. M. extensor hallucis brevis. Q. M. interossei externi. R. M. flexor digitorum pedis. S. M. lumbricalis. T. M. abductor hallucis. U. M. flexor hallucis brevis. V. M. adductor hallucis. V. a. ejus pars transversa seu transversalis pedis. W. M. adductor digiti minimi. X. M. flexor digiti minimi. Y. M. interossei interni. Z. Aponeurosis plantaris. A. lig. cruciatum. B. Ligament from the *tibialis posticus. C. ligamentum lacineatum. L. caro quadrata Sylvii,* which is attached to the tendons of the *flexor digitorum longus.* 1. 2. 3. *ligamenta tendinum peroneorum.*

FIRST VASCULAR AND NERVOUS BODY.

I.

OBSERVE. *A.* denotes *Arteria*, the artery; *V. Vena*, the Vein; and *N. Nervus*, the Nerve.

I. Vessels and Nerves on the Head.

1. *A. V. et N. supraorbitalis.* 2. *A. V. et N. frontalis.* 3. *A. V. et N. nasalis.* 3¹. *A. V. et N. nasalis externus N. ethmoidei.* 4. *A. V. et N. temporalis.* 5. *A. V. et N. palpebralis superioris et* 6. *inferioris.* 7. *A. V. et N. auricularis anterior superior et* 8. *inferior.* 9. *A. V. et N. occipitalis.* 10. *Rete zygomaticum* of the *N. facialis.* 11. *Glandula parotis.* 12. *Ductus stenonianus.* 13. *A. V. et N. transversa faciei.* 14. *Rete buccale.* 15. *Rete labiale superius.* 16. *Vena facialis anterior.* 17. *A. et V. angularis nasi.* 18. *A. et V. coronaria labii superioris et* 19. *inferioris.* 20. *N. subcutaneus maxillare inferioris* of the *N. facialis.*

II. Vessels and Nerves on the Neck.

a. Ramus auricularis et b. R. subcutaneus colli of the *III. Nervus cervicalis. c. c. c. c. N. supracapsulares et cupraclaviculares* from *III.* and *IV. Nervus cervicalis. d. d. Vena jugularis externa* mostly covered by the *Musculus subcutaneus. e. e.* Another Internal and principal venous trunk of the Neck. *f. Art. thyreoidea superior. g. A. transversa colli et cervicis.*

III. The Vessels and Nerves of the Upper Extremities.

1. 1. 1. 1. 1. *Vena cephalica.* 2. 2. 2. 2. *V. basilica.* 3. 3. *V. mediana.* 4. 4. 4. Two *Venæ brachiales.* 5. 5. 5. 5. 5. Expansion of the *Nervus cutaneus externus.* 6. *N. cutaneus internus major.* 7. *N. cutaneus internus minor.* 8. *N. medianus.* 8¹. 8². 8³. *Rami digitales communes N. mediani.* 9. *ulnaris.* 9². *N. digitalis communis rami volaris superficialis N. ulnaris.* 9³. *Ramus anastomoticus.* 9¹. *R. digitalis ulnaris digiti minimi.* 10. 10. 10. *Ramus superficialis N. radialis.* 11. *A. axillaris.* 12. *A. thoracica prima.* 13. *A. acromialis.* 14. *A. thoracica secunda.* 15. *A. thoracica tertia seu mammaria externa.* 16. *A. subscapularis.* 17. *A. circumflexa scapulæ.* 18. *A. circumflexa humeri anterior, et* 19. *posterior.* 20. *brachialis.* 21. *A. collateralis ulnaris.* 22. *A. et V. radialis.* 23. *A. recurrens radialis.* 24. *A. et V. ulnaris.* 25. *Ramus volaris superficialis A. radialis.* 26. *Ramus volaris superficialis A. ulnaris.* 27. *Arcus arteriosus, venosus et nervosus volaris superficialis.* 28. *Rami digitales communes.* 28¹. *R. digitalis ulnaris seu proprius digiti minimi.* 29. *A. et V. digitales radiales.* 30. *A. et V. digitales ulnares.*

IV.—The Vessels and Nerves of the Chest and Belly.

a. a. a. Rami perforantes et cutanei from the *A. et V. thoracica prima*

et tertia. b. b. b. b. Rami perforantes seu cutanei from the *A. et V. mammaria interna* and from the *N. intercostales. c. c. c. c. c. A. et V. N. intercostales et lumbales.* The expansion and numerous anastomoses of these vessels and nerves are sufficiently clear without further description. *d. A. et V. abdominalis Halleri. e. e. Rami perforantes* of the *A. epigastrica. f.* Branches of the *A. epigastrica* on the *Musc. cremaster* and spermatic cord. *g. N. spermaticus externus. h. N. ileo-inguinalis. i. N. lumbo-inguinalis. k. k. N. cutaneus femoris externus. A.* Cutaneous Venous *plexus* of the breast and belly.

V.—The Vessels and Nerves of the Lower Extremities.

1. *A. V. et N. cruralis.* 2. *truncus communis* of the 3. *A. circumflexa femoris externa et* 4. of the *A. abdominalis Halleri.* 5. *A. et V. spermaticæ externæ.* 6. *A. circumflexa femoris externa.* 7. *A profunda femoris.* 8. *A. circumflexa femoris interna.* 9. *Vena saphena magna et N. saphenus.* 10. *N. cutaneus medius.* 11. *N. cutaneus femoris internus.* 12. *A. et V. articularis externa superior genu.* 13. *externa inferior.* 14. *interna superior.* 15. *interna inferior.* 16. *A. tibialis antica.* 17. *A. et V. recurrens genu.* 18. *A. malleolaris externa et* 19. *interna.* 20. *N. peroneus superficialis.* 21. 22. *A. V. et Nervi digitales communes, tibiales et peronei.* 23. *A. V. et N. tibialis posticus.* 24. *A. V. et N. plantaris externus.* 25. *A. V. et N. plantaris internus.*

VI.—The Vessels and Nerves of the Penis.

a. Venæ dorsales penis. b. A. dorsales penis. c. Nervi dorsales penis.

SECOND GENERAL ANTERIOR VIEW OF THE

BLOOD-VESSELS AND NERVES.

K.

I.—Arteries, Veins and Nerves of the Head and Neck.

1. *A. carotis communis.* 2. *A. et V. thyreoidea superior, et N. laryngeus superior.* 3. *A. et V. lingualis.* 4. *N. hypoglossus.* 5. *Ramus descendens nervi hypoglossi* (*descendens noni*). 6. 7. *Rami anastomotici* from the II. and III. *N. cervicalis* to the *ramus descendens N. hypoglossi.* 8. 8. *V. jugularis interna.* A portion of the vein is removed to show the carotid artery and the *nervus vagus*, the former situated on the inner side, the latter below the vein. 8^1. The point of junction of the *V. jugularis externa.* 9. *N. vagus.* 10. *N. phrenicus.* 11. *A. et V. maxillaris externa.* 12. *A. submentalis* proceeding from the *A. maxillaris externa.* 13. *A. et V. coronaria labii inferioris.* 13^1. *A. et V. coron. labii superioris.* 13^2. *A. et V. angularis nasi.* 14. 14. *V. facialis anterior.* 15. *A. et V. temporalis superficialis.* 15. *A. et V. temporalis profunda.* 17. *A. et V. transversa faciei; plexus anserinus N. facialis.* 18. *A. et V. auricularis posterior.* 19. *A. et V. occipitalis.* 20. *V. facialis posterior.* 21. *A. V. et N. buccinatorius.* 22. *A. V. et N. infra-orbitalis.* 23. *A. V. et N. alveolaris inferior.* 24. *A. V. et N. subcutaneus malæ.* Within the cavity of the orbit. 25. *A. V. et N. lacrymalis.* 26. *A. ophthalmica.* 27. *A. V. et N. ethmoidales.* 28. *A. V. et N. supraorbitalis.* 29. *A. frontalis.* 30. *A. nasalis.* 31. *N. naso-ciliaris.* 32. *N. frontalis.* 33. *N. opticus.* 34. *N. trochlearis.* 35. *N. oculo-motorius.* 36. *N. abducens.* 36^1. *V. ophthalmo-cerebralis.* 36^2. *A. V. et N. nasalis externus.* 37. *A. et V. subclavia.* 38. *A. mammaria interna.* 39. *A. intercostalis prima.* 40. *A. et V. transversa scapulæ et N. suprascapularis.* 41. *A. et V. transversa colli et cervicis.* 42. Common trunks of 43. the *A. et V. cervicalis ascendens*, and of 44. the *A. thyreoidea inferior.* 45. *A. et V. vertebralis.* 46. *A. cervicalis profunda.* 47. *Quatuor inferiores N. cervicales.*

II.—Arteries, Veins and Nerves of the Superior Extremity.

a. A. et V. axillaris. b. c. d. A. V. et N. pectorales. e. Rami costales superiores. et f. inferiores, arising sometimes from the *A. subclavia*, sometimes from the *A. axillaris*, and occasionally also from the branches of the *A. axillaris* which are distributed to the muscles of the breast. These various branches inosculate freely as is everywhere apparent. *g.* anastomoses with the *A. intercostales* and *h.* with twigs of the *A. mammaria interna.* (38.) *i. A. V. et N. subscapulares. k. A. circumflexa scapulæ. l. A. circumflexa humeri anterior et m. posterior. n. A. et V. brachiales. o. A. profunda brachii. p. A. et V. collaterales ulnares. q. N. respiratorius externus Bell. r. N. cutaneus internus minor* of *N. intercostalis secundus. s. N. cutaneus internus major. t. N. cutaneus externus seu perforans Casserii. u. N. medianus. v. N.*

ulnaris. w. N. radialis. x. A. et V. radiales. y. A. et V. recurrentes radiales. z. z. A. et V. ulnares. 1. *A. et V. recurrentes ulnares.* 2. *A. et N. interosseus.* 3. *Ramus volaris superficialis. A. et V. radialis.* 4. *R. Volaris profundus A. radialis.* 5. *R. dorsalis A. V. et N: ulnaris.* 6. *R. volaris superficialis A. et V. ulnaris et R. anastomoticus N. ulnaris.* 7. *R. volaris profundus A. V. et N. ulnaris.* 8. *Arcus volaris sublimis et* 9. *profundus.* 10. *A. V. et N. interossei.* 11. Termination of the deep volar branch of the *N. ulnaris* in the *adductor pollicis* muscle. 21. *Rete carpi volare superficiale.* 13. *Rete carpi volare profundum.* 14. The divided *A. digitales communes.* The other vessels and nerves of the hand are already known in the views that have been given in the first general anterior view of the muscular and nervous systems.

III.—Vessels and Nerves of the Thorax and Abdomen.

1. *A. V. et N. intercostales* where they emerge from between the external and internal layer of intercostal muscles. 2. *A. V. et N. intercostales*, after the removal of the external intercostal muscles when the trunks are completely exposed. 3. *Rami costales superiores*, proceeding from the *A. intercostales.* 4. *Rami phrenici superiores*, arising from the same sources. 5. *Rami phrenici superiores*, proceeding from the *A. mammaria interna.* 6. *A. et V. mammaria interna.* 7. *A. et V. epigastrica superior*, or last distribution of the *A. mammaria interna* on the anterior abdominal parietes, and in anastomoseus branches with the *A. epigastrica inferior.* 8. *A. V. et N. lumbales anteriores.* 9. *A. et V. epigastrica.* 10. Appearance of the veins between the Obliquus internus and rectus, both of which are removed, and transversalis muscle which remains. 11. *A. et V. spermatica interna.* 12. *Vas deferens.* 13. *A. vasis deferentis* springing from the *A. hypogastrica.*

IV.—Vessels and Nerves of the Pelvis and Lower Extremity.

a. A. iliaca communis. b. A. V. et N. cruralis. c. hypogastria. d. A. ilio-lumbalis. e. A. umbicalis obliterated. *f. A. vasis deferentis. g. A. V. et N. obturatorius. h. A. glutæa superior. i. truncus A. glutæa inferioris et pudendæ communis. k. A. sacrales laterales. l. A. epigastrica.* On the right side it is seen accompanied by its vein (*g.*) *m.* Branch of the *A. epigastrica* sent to the spermatic cord. *n. A. circumflexa ilei interna. o. Truncus A. et V. circumflexa ilei externæ et abdominalis Halleri. p. q. A. spermaticæ externæ. r. A. et V. circumflexa femoris externæ. s. A. et V. profunda femoris. t. A. et V. circumflexa femoris internæ. u. v. w. x. A. et V. articulares genu. y. N. saphenus. z. A. V. et N. musculares.* 1. *A. et V. tibialis antica.* 2. *A. et V. recurrens genu.* 3. *A. et V. maleolaris externa et* 4. *interna.* 5. *Ramus perforans A. peroneæ.* 6. *A. et V. tarsea.* 7. *metatarsea externa et* 8. *interna.* 9. *A. digitales communes*, which then bifurcate into a *Ramus tibialis et peroneus.* 10. *Arcus arteriosus dorsalis pedis.* 11. *N. peroneus.* 12. *R. superficialis N. peronei.* 13. *R. profundus N. peronei.* 14. *N. vasorum.* 15. *A. V. et N. tibialis.* 16. *A. V. et N. plantaris externus et* 17. *internus.*

Fig. I. The penis of a Negro on which the nerves are particularly demonstrated. The member is inflated with air, and the glans is turned over from behind and forwards.

A. A. The *corpora cavernosa penis* as removed from the lower margin of the pelvis. *B.* The urethra divided. *b.* The glans which is separated posteriorly from the *corpora cavernosa* and with the *corona glandis* is turned over. *a. a.* The *V. dorsalis penis* divided.

Nerves.

1. *N. penis dexter* divided. 2. *N. penis sinister.* 3. 3. Divided twigs that run to the distributed of the skin of the penis. 4. 4. Twigs that run behind the *V. dorsalis.* 5. A principal branch which expands inferiorly upon the skin of the penis. 6. 6. The most external branch of the *N. penis-ramus externus nervi penis* on both sides. 7. 7. The innermost branch of the same. 8. 8. *plexus dorsalis penis sinister*, which has been drawn outwards. 9. 9. *plexus dorsalis penis dexter*, which is represented in situ. 10. 10. 10. Principal branches, *Rami cutanei* of the plexus. 11. Terminal branches which penetrate the glans superiorly or posteriorly. 12. A similar branch which suddenly divides into a great number of twigs.

Fig. II. Represents the external aspect of the Foot.

1. *A. dorsalis pedis seu tarsea.* 2. *tarsea interna.* 3. 4. *A. tarsea externa.* 5. *A. maleolaris anterior externa.* 6. *A. calcanea externa.* The anastomoses and remaining branches are already known from the General Views.

Fig. III. 1. *A. tibialis postica.* 2. *A. plantaris externa.* 3. *A. plantaris interna.* 4. 6. *Ramus lateralis superficialis pedis externus.* 5. 11. *Ramus anastomoticus* with the *A. tarsea interna.* 7. *A. dorsalis hallucis interna.* 8. *A. malleolaris antica interna.* 9. 10. *A. tarsea interna.*

THIRD GENERAL VIEW OF THE BLOOD-VESSELS AND

NERVES FROM BEHIND.

L.

I. Arteries, Veins and Nerves of the Head and Trunk.

1. and 2. The arteries, veins and nerves of the frontal and auricular regions, as they are already known from the first general anterior view of the subject prepared for the exhibition of these parts. * A vein of the common integument of the head passing through the *foramen parietale*. This vein empties itself into the longitudinal sinus. 3. *A. V. et N. occipitalis major.* * * *A. meningea posterior*, which arises from the *A. occipitalis*, and penetrating the *foramen mastoideum* proceeds to the distributed to the *dura mater*. 4. *N. occipitalis minor.* 5. *N. auricularis posterior.* 6. *N. accessorius Willisii.* 7. *Vena jugularis externa.* 8. *N. supra scapulares.* 9. *A. V. et N. cutanei dorsi et colli.* 9^{a}. 9^{a}. *A. V. et N. lumbales.* 9^{b}. *Rami cutanei posteriores.* 9^{c}. *Rami cutanei anteriores* of the *N. intercostales.* 9^{d}. *Rami cutanei posteriores* of the *N. sacrales.* 9^{e}. *Rami posteriores* of the *N. intercostales.* 9^{f}. Cutaneous twigs of the posterior branches of the *N. intercostales*, divided and reflected. 9^{g}. *Rami posteriores* of the *A. intercostales.* 9^{h}. *A. V. et N. intercostales.* 9^{i}. *Rami inferiores* of the intercostal vessels which run along the superior margins of the ribs. 9^{k}. Cutaneous twigs divided of the *A. intercostales.* 9^{l}. *Ramus communicans* between the 10th and 9th *N. intercostalis.* To obtain a view of these vessels and nerves, the external intercostal muscles must be removed, as has been done in the three most inferior intercostal spaces. 9^{m}. *A. V. et N. lumbales.* The external oblique muscle has been here taken away.

II.—Arteries, Veins and Nerves of the upper Extremity.

10. *A. V. et N. transversus colli.* 11. *A. et V. dorsalis scapulæ.* 12. *V. propria et N. dorsalis scapulæ.* 13. *A. et V. transversa scapulæ.* 14. *N. suprascapularis.* 15. *A. et V. circumflexa scapulæ.* 15^{a}. *R. dorsalis A. et N. subscapularis.* 16. *Rami communicantes.* 17. *A. et V. circumflexa humeri posterior.* 18. 18. *N. axillaris.* 19. *Rami cutanei N. axillaris et A. circumflexæ humeri posterioris.* 20. *Rami N. cutanei posterioris interni.* 21. *N. cutaneus posterior superior N. radialis.* 22. *R. cutaneus N. musculo-cutanei.* 23. *Rami N. cutanei interni.* 24. *Ramus posterior seu ulnaris N. cutanei medii.* 25. *N. ulnaris* accompanied by the *A. recurrens ulnaris.* 26. *N. radialis.* 27. The *V. et A. profunda brachii*, which accompany the *N. radialis.* (As the nerve and vessel both run close to the os humeri between the heads of the triceps muscle, and are thus covered by this muscle, it is necessarily divided lengthwise in the direction of its fibres and each half held a little apart from one another in order to expose the parts indicated.)

28. *Ramus profundus seu supinatorius N. radialis.* As this nerve runs through the supinator brevis muscle, I have in like manner divided the whole of the muscular fibres which lay above it, and represented these as somewhat separated from one another. 29. *A. interossea dorsalis.* 30. *Ramus descendens.* 31. *R. ascendens,* anastomosing with the *A. profunda.* 32. *A. et N. interosseus.* 33. 34. *A. radialis.* 34. At this point the *A. radialis* enters the *vola* or palm of the hand. 34ª. 35. 36. 37. 38. *Rami dorsales carpi,* which by their anastomoses with the branches of the *A. interossea,* and of the dorsal branches of the *A. ulnaris* compose the *rete carpi dorsale sublime,* 39. and the *rete carpi dorsale profundum.* 40. 41. *Ramus dorsalis radialis pollicis.* 42. *R. dorsalis ulnaris pollicis.* 43. *R. digitalis dorsalis radialis indicis.* 44. *R. dorsalis A. radialis.* 45. *R. communis dorsalis indicis,* 46. *et digiti medii.* 47. 48. *R. dorsalis N. radialis.* The divisions of this nerve must be apparent without any more particular reference. 49. *R. dorsalis N. V. et A. ulnaris.* 50. 51. 52. Anastomosing branches to the *rete carpi dorsale sublime* (39) and *rete profundum* (40). 53. *R digitalis dorsalis ulnaris digiti minimi.* 54. *R. digitalis dorsalis communis digiti minimi et annularis.* 55. *R. digitalis dorsalis communis digiti annularis et medii.* In the present subject this branch is composed of the dorsal branches referred to by 44. and 49, the *R. dorsales* of the *A. radialis et ulnaris,* and a perforating branch of the *arcus volaris profundus.* 57. *rete venosum dorsale manus.* 58. *rete dorsale venosum antibrachii et brachii.* 59. 60. Two principal trunks into which the smaller veins of the hand collect, and which by their union compose the vena cephalica. 61. 62. Two trunks which unite to form the *vena basilica.*

III.—Arteries, Veins and Nerves of the Pelvis and Lower Extremity.

63. *Ramus cutaneus seu lateralis* of the 12th dorsal nerve. 64. *R. posteriores N. cutanei anterioris externi femoris.* 65. Inferior cutaneous nerve of the branch proceeding from the *N. ischiadicus.* 66. *N. cutaneus communis posterior femoris,* or common posterior cutaneous nerve of the upper part of the thigh. 67. *Rami N. cutanei anterioris interni femoris.* 68. *N. saphenus,* or the left great internal cutaneous nerve. 69. *R. posterior,* or posterior branch of the same. 70. *A. V. et N. gluteus superior et* 71. *inferior.* 72. *A. et N. pudendus internus seu communis.* * *Rami anastomotici* with the *A. circumflexa femoris externa.* 73. *N ischiadicus.* 74. *Rami peroneus.* 75. *R. tibialis N. ischiadici.* 76. *R. cutaneus externus cruris, seu R. communicans fibulæ.* 77. *R. longus cutaneus seu communicans tibialis.* 78. 79. 80. *R. cutaneus externus dorsi pedis.* 81. *Vena poplitea.* 82. *Arteria poplitea.* 83. *V. et A. articularis genu superior externa.* 84. *A. et V. superior interna.* 85. *V. et A. articularis genu inferior externa.* 86. *V. et A. articularis genu inferior interna.* 87. *Rami musculares.* 88. *A. et V. tibialis antica.* * *A. nutricia tibiæ.* 89. *V. et A. tibialis postica.* 90. *V. et A. fibularis seu peronea.* It is for the most part covered by the long flexor of the great toe, and its course is therefore indicated by interrupted lines (91.) 93. *V. et A. malleolaris externa.* 93. *V. et A. tarsea.* 94. *Vena saphena parva.* 95. Junction of this vein with the *V. cruralis.*

Fig. I. and II. Both of these figures are from Bock,*) and exhibit to

* Abbildungen der Rückenmarksnerven, fol., Leipz., 1827.

a certain extent the *plexus sacralis*, and the division of the *N. ischiadicus*, but more particularly those of the *N. pudendus internus*.

Fig. I. 1. *Plexus sacralis.* 2. *N. ischiadicus.* 3. *N. pudendus communis.* 4. *Ramus anastomoticus.* 5. Common trunk made up of the posterior branches of the *N. sacrales.*

Fig. II. 1. *N. hæmorrhoidalis inferior*, or inferior rectal nerve. 2. *N. pudendus inferior*, or inferior pubic nerve. 3. Reflected branches of the same which ramify upon the skin of the lower portion of the pelvis. 4. *N. pudendus superior, seu externus, seu clitoridis*, the superior or outer pubic nerve, or nerve of the clitoris, at the point where it comes forward from under the symphysis pubis and expands on the *dorsum of the clitoris.* 5. Two branches of the common cutaneous nerve of the upper portion of the thigh or buttock which emerge from under the *glutæus maximus* muscle, unite into a single trunk as they are passing round the tuberosity of the ischium, which then proceeds under the integument of the perineum to the *mons veneris*, and there anastomoses with a branch of the *N. pudendus inferior.* 6. The anastomosis of the branch just described with that of the *N. pudendus inferior.*

Figs. III. and IV. The Arteries and nerves of the sole of the foot, *planta pedis.*

a. Trunk of the *A. tibialis postica.* *b. Ramus plantaris internus.* *c.* Branches distributed to the *abductor*, and *d.* to the *flexor brevis hallucis* muscles. *e.* A long connecting branch to the *Ramus plantaris externus.* *f.* Branch to the metatarsal bone and to the ligaments of the great toe. *g. Ramus digitalis tibialis* of the great toe, which anastomoses with *h.* the *Ramus digitalis fibularis hallucis.* *i. Ramus plantaris externus*, forming the deep plantar arch. *k.* Branches from this to the tarsal and metatarsal bones, and to the muscles of the little toe. *l. Ejus ramus proprius seu externus digiti minimi.* *m. Rami digitales plantares communes.* *n. R. digitalis tibialis seu internus digiti minimi.* *o. R. externus.* *p. R. internus digiti quarti.* *q. R. externus.* *r. R. internus digiti tertii.* *s. R. externus.* *t. R. internus digiti secundi.* *u. R. externus hallucis.* *v. R. perforantes.* *w. Ramus communicans* the *R. plantaris internus* et *externus.* *x.* Anastomoses of the individual digital branches. *y. Rami interossei* of the *N. et A. plantaris externa.*

1. Trunk of the *N. tibialis posticus.* 2. *Ramus plantaris internus.* The division of this nerve into four branches, 3. 4. 5. and 6. and their several distributions to the toes are sufficiently evident. 7. *R. plantaris externus*, forming the *arcus nervosus plantaris.* 8. 9. The *R. digitales plantares* proceeding from the same. 10. Termination of the *N. plantaris externus* in the *musculus adductor hallucis.* 12. *Ramus communicans* of the *N. plantaris externus et internus.*

Fig. V. *a.* Cutaneous veins of the *planta pedis.* *b.* The deeper veins which accompany the arteries and bear the same denominations. The remaining vessels and nerves are already known from the explanations of the two figures immediately preceding.

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